

## 2020 SUMMER WORK TO PREPARE YOU FOR HONORS GEOMETRY

Dear Students,

Welcome to Geometry Honors! Your recommendation into this course tells me that you want to be challenged, stretched, and that you are highly motivated.

Geometry Honors is an advanced course that moves at a quick pace. To better prepare you for this course next year, I am asking you to do some work to prepare you for the rigor of the class.

Please choose a book from the reading list over the summer. Copies can be borrowed from the local library, or online with a Westchester library card (utilize the Westchester Library System and Overdrive to download books to any electronic device). Reading any of these will give you a greater understanding of mathematics in the real world and help you appreciate what you will be learning next school year. I will ask that you report back to the class what you read and what you found interesting and worth sharing within the first few days of the new school year, so please take some notes and write a short 1-2 page summary of the book that you chose.

In addition, I have placed numerous worksheets on the summer work link. These worksheets will keep old Algebra and Pre-Algebra topics fresh in your head so they are ready to be used in the Geometry Honors course. There is no particular order to these assignments. They do include an answer key for each one, however if you run into questions along the way, you can send me an email at [tbarbuto@mtplscd.org](mailto:tbarbuto@mtplscd.org) and I will do my best to get back to you.

These assignments areas follows:

- $\pi$  Classifying Solids
- $\pi$  Classifying Triangles and Quads
- $\pi$  Factoring
- $\pi$  Factoring Special Cases
- $\pi$  Multiplying Radical Expressions
- $\pi$  Multi-Step Equations
- $\pi$  Pythagorean Theorem
- $\pi$  Reflection of Shapes
- $\pi$  Rotational of Shapes
- $\pi$  Simplifying Radicals
- $\pi$  Translations of Shapes
- $\pi$  Two-Step Equations
- $\pi$  Volume of Solids

Have a great summer!!

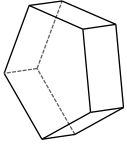
Sincerely,

Mrs. Barbuto

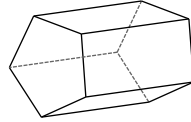
# Classifying Solids

Name each figure.

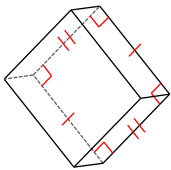
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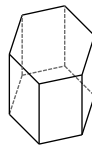
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3)



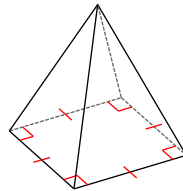
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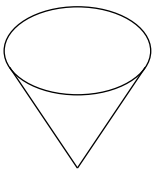
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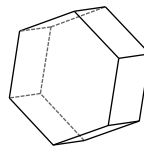
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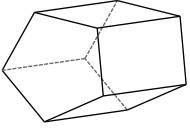
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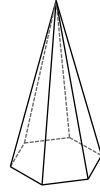
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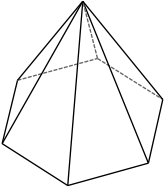
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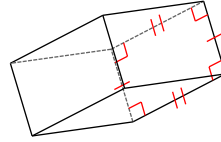
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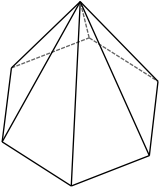
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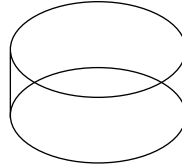
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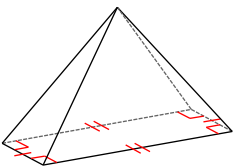
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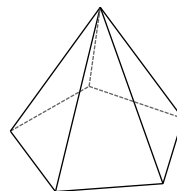
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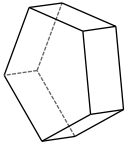
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# Classifying Solids

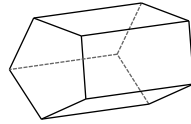
Name each figure.

1)



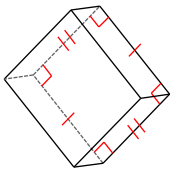
pentagonal prism

2)



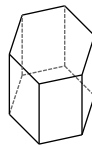
pentagonal prism

3)



rectangular prism

4)



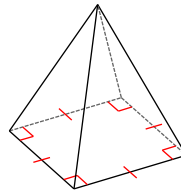
hexagonal prism

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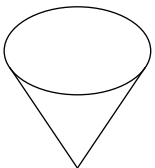
cone

6)



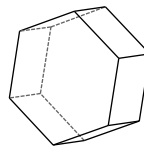
square pyramid

7)



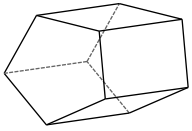
cone

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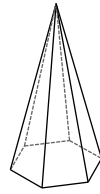
hexagonal prism

9)



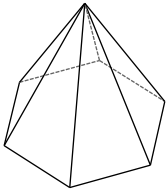
pentagonal prism

10)



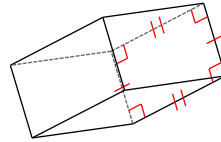
hexagonal pyramid

11)



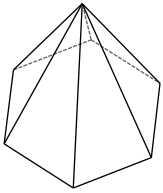
hexagonal pyramid

12)



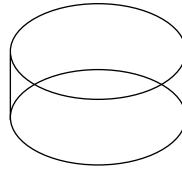
rectangular prism

13)



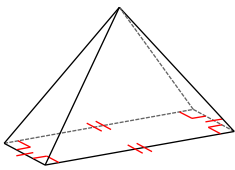
hexagonal pyramid

14)



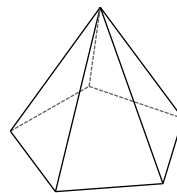
cylinder

15)



rectangular pyramid

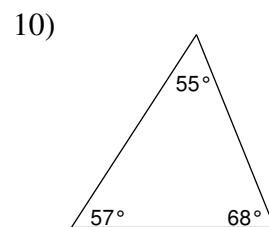
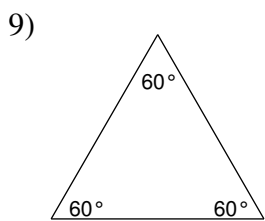
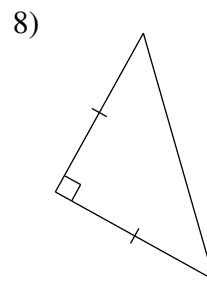
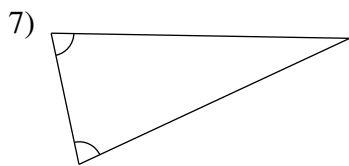
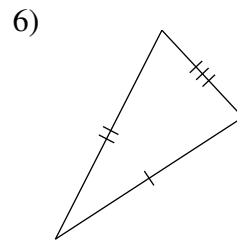
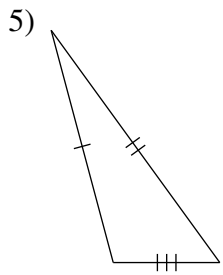
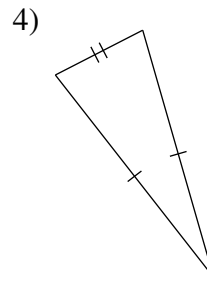
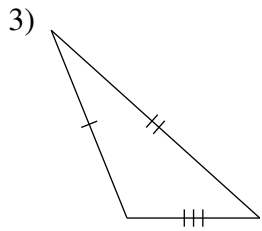
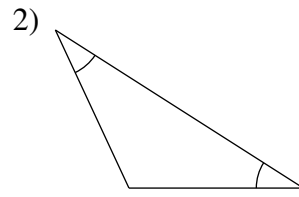
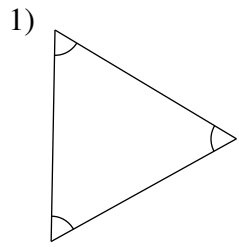
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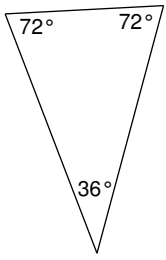
pentagonal pyramid

# Classifying Triangles and Quadrilaterals

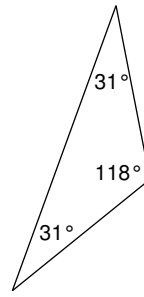
Classify each triangle by its angles and sides.



11)

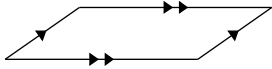


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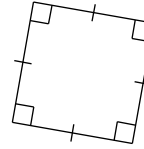


**Classify each quadrilateral with the name that best describes it.**

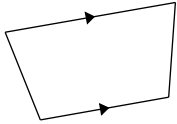
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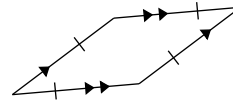
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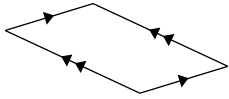
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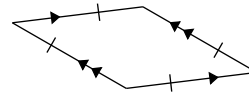
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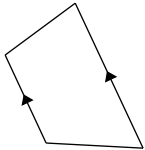
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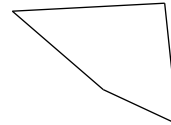
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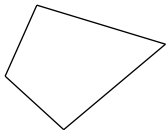
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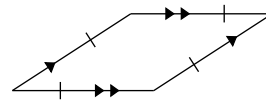
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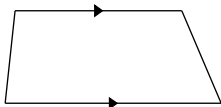
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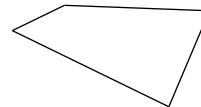
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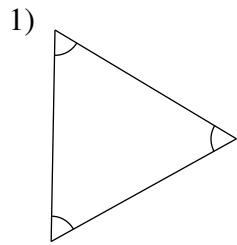


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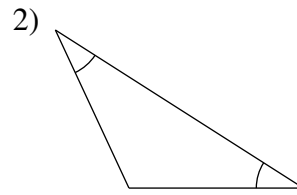


# Classifying Triangles and Quadrilaterals

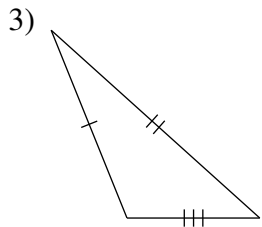
Classify each triangle by its angles and sides.



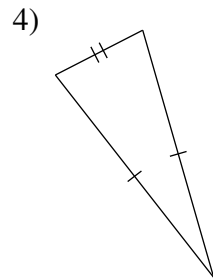
equilateral



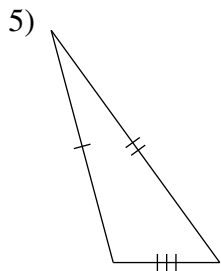
obtuse isosceles



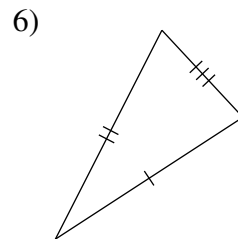
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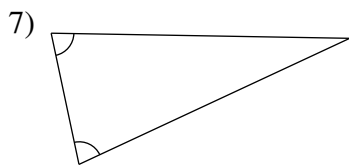
acute isosceles



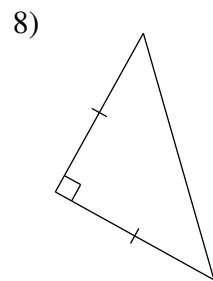
obtuse scalene



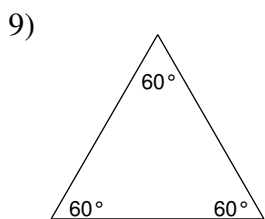
acute scalene



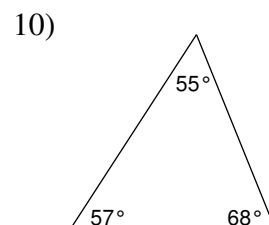
acute isosceles



right isosceles

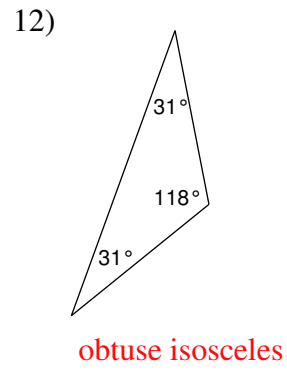
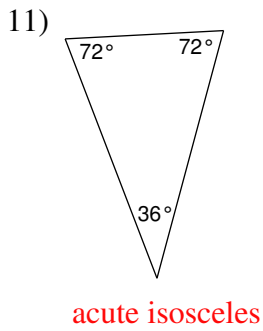


equilateral

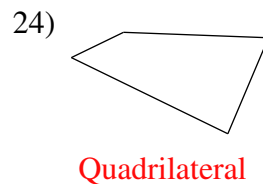
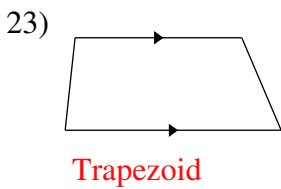
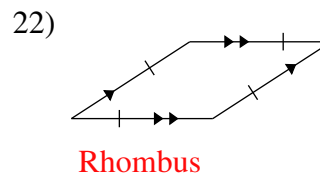
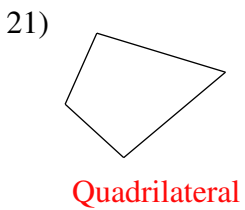
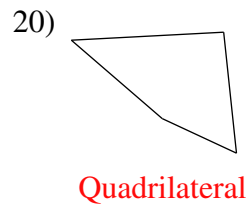
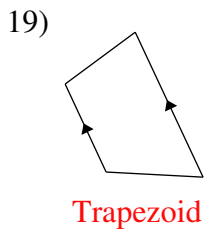
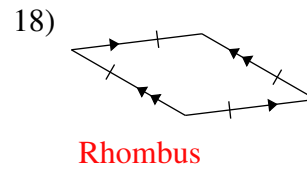
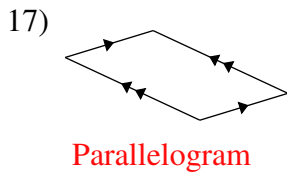
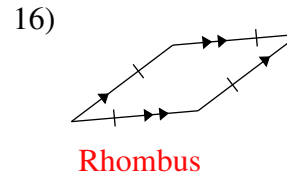
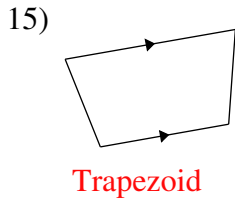
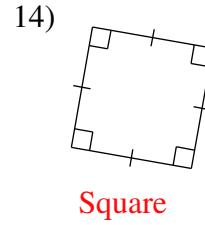
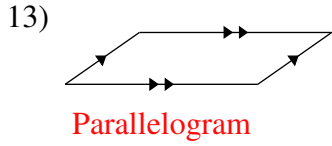


acute scalene





Classify each quadrilateral with the name that best describes it.



## Factoring Trinomials (a = 1)

**Factor each completely.**

1)  $b^2 + 8b + 7$

2)  $n^2 - 11n + 10$

3)  $m^2 + m - 90$

4)  $n^2 + 4n - 12$

5)  $n^2 - 10n + 9$

6)  $b^2 + 16b + 64$

7)  $m^2 + 2m - 24$

8)  $x^2 - 4x + 24$

9)  $k^2 - 13k + 40$

10)  $a^2 + 11a + 18$

11)  $n^2 - n - 56$

12)  $n^2 - 5n + 6$

13)  $b^2 - 6b + 8$

14)  $n^2 + 6n + 8$

15)  $2n^2 + 6n - 108$

16)  $5n^2 + 10n + 20$

17)  $2k^2 + 22k + 60$

18)  $a^2 - a - 90$

19)  $p^2 + 11p + 10$

20)  $5v^2 - 30v + 40$

21)  $2p^2 + 2p - 4$

22)  $4v^2 - 4v - 8$

23)  $x^2 - 15x + 50$

24)  $v^2 - 7v + 10$

25)  $p^2 + 3p - 18$

26)  $6v^2 + 66v + 60$

## Factoring Trinomials (a = 1)

**Factor each completely.**

1)  $b^2 + 8b + 7$

$(b + 7)(b + 1)$

2)  $n^2 - 11n + 10$

$(n - 10)(n - 1)$

3)  $m^2 + m - 90$

$(m - 9)(m + 10)$

4)  $n^2 + 4n - 12$

$(n - 2)(n + 6)$

5)  $n^2 - 10n + 9$

$(n - 1)(n - 9)$

6)  $b^2 + 16b + 64$

$(b + 8)^2$

7)  $m^2 + 2m - 24$

$(m + 6)(m - 4)$

8)  $x^2 - 4x + 24$

Not factorable

9)  $k^2 - 13k + 40$

$(k - 5)(k - 8)$

10)  $a^2 + 11a + 18$

$(a + 2)(a + 9)$

11)  $n^2 - n - 56$

$(n + 7)(n - 8)$

12)  $n^2 - 5n + 6$

$(n - 2)(n - 3)$

$$13) b^2 - 6b + 8$$
$$(b - 4)(b - 2)$$

$$14) n^2 + 6n + 8$$
$$(n + 2)(n + 4)$$

$$15) 2n^2 + 6n - 108$$
$$2(n + 9)(n - 6)$$

$$16) 5n^2 + 10n + 20$$
$$5(n^2 + 2n + 4)$$

$$17) 2k^2 + 22k + 60$$
$$2(k + 5)(k + 6)$$

$$18) a^2 - a - 90$$
$$(a - 10)(a + 9)$$

$$19) p^2 + 11p + 10$$
$$(p + 10)(p + 1)$$

$$20) 5v^2 - 30v + 40$$
$$5(v - 2)(v - 4)$$

$$21) 2p^2 + 2p - 4$$
$$2(p - 1)(p + 2)$$

$$22) 4v^2 - 4v - 8$$
$$4(v + 1)(v - 2)$$

$$23) x^2 - 15x + 50$$
$$(x - 10)(x - 5)$$

$$24) v^2 - 7v + 10$$
$$(v - 5)(v - 2)$$

$$25) p^2 + 3p - 18$$
$$(p - 3)(p + 6)$$

$$26) 6v^2 + 66v + 60$$
$$6(v + 10)(v + 1)$$

## Factoring Special Cases

**Factor each completely.**

1)  $16n^2 - 9$

2)  $4m^2 - 25$

3)  $16b^2 - 40b + 25$

4)  $4x^2 - 4x + 1$

5)  $9x^2 - 1$

6)  $n^2 - 25$

7)  $n^4 - 100$

8)  $a^4 - 9$

9)  $k^4 - 36$

10)  $n^4 - 49$

$$11) 98n^2 - 200$$

$$12) 3 + 6b + 3b^2$$

$$13) 400 - 36v^2$$

$$14) 100x^2 + 180x + 81$$

$$15) 10n^2 + 100n + 250$$

$$16) 49n^2 - 56n + 16$$

$$17) 49x^2 - 100$$

$$18) 1 - r^2$$

$$19) 10p^3 - 1960p$$

$$20) 343b^2 - 7b^4$$

$$21) 81v^4 - 900v^2$$

$$22) 200m^4 + 80m^3 + 8m^2$$

## Factoring Special Cases

**Factor each completely.**

1)  $16n^2 - 9$

$(4n + 3)(4n - 3)$

2)  $4m^2 - 25$

$(2m + 5)(2m - 5)$

3)  $16b^2 - 40b + 25$

$(4b - 5)^2$

4)  $4x^2 - 4x + 1$

$(2x - 1)^2$

5)  $9x^2 - 1$

$(3x + 1)(3x - 1)$

6)  $n^2 - 25$

$(n + 5)(n - 5)$

7)  $n^4 - 100$

$(n^2 + 10)(n^2 - 10)$

8)  $a^4 - 9$

$(a^2 + 3)(a^2 - 3)$

9)  $k^4 - 36$

$(k^2 + 6)(k^2 - 6)$

10)  $n^4 - 49$

$(n^2 + 7)(n^2 - 7)$



$$11) 98n^2 - 200$$

$$2(7n + 10)(7n - 10)$$

$$12) 3 + 6b + 3b^2$$

$$3(1 + b)^2$$

$$13) 400 - 36v^2$$

$$4(10 + 3v)(10 - 3v)$$

$$14) 100x^2 + 180x + 81$$

$$(10x + 9)^2$$

$$15) 10n^2 + 100n + 250$$

$$10(n + 5)^2$$

$$16) 49n^2 - 56n + 16$$

$$(7n - 4)^2$$

$$17) 49x^2 - 100$$

$$(7x + 10)(7x - 10)$$

$$18) 1 - r^2$$

$$(1 + r)(1 - r)$$

$$19) 10p^3 - 1960p$$

$$10p(p + 14)(p - 14)$$

$$20) 343b^2 - 7b^4$$

$$7b^2(7 + b)(7 - b)$$

$$21) 81v^4 - 900v^2$$

$$9v^2(3v + 10)(3v - 10)$$

$$22) 200m^4 + 80m^3 + 8m^2$$

$$8m^2(5m + 1)^2$$

## Multiplying Radical Expressions

**Simplify.**

1)  $3\sqrt{12} \cdot \sqrt{6}$

2)  $\sqrt{5} \cdot \sqrt{10}$

3)  $\sqrt{6} \cdot \sqrt{6}$

4)  $\sqrt{5} \cdot -4\sqrt{20}$

5)  $-4\sqrt{15} \cdot -\sqrt{3}$

6)  $\sqrt{20x^2} \cdot \sqrt{20x}$

7)  $\sqrt{15n^2} \cdot \sqrt{10n^3}$

8)  $\sqrt{18a^2} \cdot 4\sqrt{3a^2}$

9)  $-3\sqrt{7r^3} \cdot 6\sqrt{7r^2}$

10)  $-4\sqrt{28x} \cdot \sqrt{7x^3}$

11)  $\sqrt{3}(5 + \sqrt{3})$

12)  $2\sqrt{5}(\sqrt{6} + 2)$

13)  $-3\sqrt{3}(2 + \sqrt{6})$

14)  $\sqrt{3}(-5\sqrt{10} + \sqrt{6})$

15)  $-2\sqrt{15}(-3\sqrt{3} + 3\sqrt{5})$

16)  $5\sqrt{42x}(4 + 4\sqrt{7x})$

17)  $\sqrt{14x}(3 - \sqrt{2x})$

18)  $\sqrt{6n}(7n^3 + \sqrt{12})$

19)  $\sqrt{3v}(\sqrt{6} + \sqrt{10})$

20)  $\sqrt{21r}(5 + \sqrt{7})$

21)  $(-2\sqrt{3} + 2)(\sqrt{3} - 5)$

22)  $(5 - 4\sqrt{5})(-2 + \sqrt{5})$

23)  $(-2 - 3\sqrt{5})(5 - \sqrt{5})$

24)  $(\sqrt{5} - \sqrt{3})(\sqrt{5} + \sqrt{3})$

25)  $(5\sqrt{2x} + \sqrt{5})(-4\sqrt{2x} + \sqrt{5x})$

26)  $(-3\sqrt{3k} + 4)(\sqrt{3k} - 5)$

27)  $(5 + 4\sqrt{3})(3 + \sqrt{3})$

28)  $(3\sqrt{2} + \sqrt{5})(\sqrt{2} - 3\sqrt{5r})$

## Multiplying Radical Expressions

**Simplify.**

$$1) 3\sqrt{12} \cdot \sqrt{6}$$
$$18\sqrt{2}$$

$$2) \sqrt{5} \cdot \sqrt{10}$$
$$5\sqrt{2}$$

$$3) \sqrt{6} \cdot \sqrt{6}$$
$$6$$

$$4) \sqrt{5} \cdot -4\sqrt{20}$$
$$-40$$

$$5) -4\sqrt{15} \cdot -\sqrt{3}$$
$$12\sqrt{5}$$

$$6) \sqrt{20x^2} \cdot \sqrt{20x}$$
$$20x\sqrt{x}$$

$$7) \sqrt{15n^2} \cdot \sqrt{10n^3}$$
$$5n^2\sqrt{6n}$$

$$8) \sqrt{18a^2} \cdot 4\sqrt{3a^2}$$
$$12a^2\sqrt{6}$$

$$9) -3\sqrt{7r^3} \cdot 6\sqrt{7r^2}$$
$$-126r^2\sqrt{r}$$

$$10) -4\sqrt{28x} \cdot \sqrt{7x^3}$$
$$-56x^2$$

$$11) \sqrt{3}(5 + \sqrt{3})$$
$$5\sqrt{3} + 3$$

$$12) 2\sqrt{5}(\sqrt{6} + 2)$$
$$2\sqrt{30} + 4\sqrt{5}$$

$$13) -3\sqrt{3}(2 + \sqrt{6})$$
$$-6\sqrt{3} - 9\sqrt{2}$$

$$14) \sqrt{3}(-5\sqrt{10} + \sqrt{6})$$
$$-5\sqrt{30} + 3\sqrt{2}$$

$$15) -2\sqrt{15}(-3\sqrt{3} + 3\sqrt{5})$$
$$18\sqrt{5} - 30\sqrt{3}$$

$$16) 5\sqrt{42x}(4 + 4\sqrt{7x})$$
$$20\sqrt{42x} + 140x\sqrt{6}$$

$$17) \sqrt{14x}(3 - \sqrt{2x})$$
$$3\sqrt{14x} - 2x\sqrt{7}$$

$$18) \sqrt{6n}(7n^3 + \sqrt{12})$$
$$7n^3\sqrt{6n} + 6\sqrt{2n}$$

$$19) \sqrt{3v}(\sqrt{6} + \sqrt{10})$$
$$3\sqrt{2v} + \sqrt{30v}$$

$$20) \sqrt{21r}(5 + \sqrt{7})$$
$$5\sqrt{21r} + 7\sqrt{3r}$$

$$21) (-2\sqrt{3} + 2)(\sqrt{3} - 5)$$
$$-16 + 12\sqrt{3}$$

$$22) (5 - 4\sqrt{5})(-2 + \sqrt{5})$$
$$-30 + 13\sqrt{5}$$

$$23) (-2 - 3\sqrt{5})(5 - \sqrt{5})$$
$$5 - 13\sqrt{5}$$

$$24) (\sqrt{5} - \sqrt{3})(\sqrt{5} + \sqrt{3})$$
$$2$$

$$25) (5\sqrt{2x} + \sqrt{5})(-4\sqrt{2x} + \sqrt{5x})$$
$$-40x + 5x\sqrt{10} - 4\sqrt{10x} + 5\sqrt{x}$$

$$26) (-3\sqrt{3k} + 4)(\sqrt{3k} - 5)$$
$$-9k + 19\sqrt{3k} - 20$$

$$27) (5 + 4\sqrt{3})(3 + \sqrt{3})$$
$$27 + 17\sqrt{3}$$

$$28) (3\sqrt{2} + \sqrt{5})(\sqrt{2} - 3\sqrt{5r})$$
$$6 - 9\sqrt{10r} + \sqrt{10} - 15\sqrt{r}$$

## Multi-Step Equations

**Solve each equation.**

1)  $-20 = -4x - 6x$

2)  $6 = 1 - 2n + 5$

3)  $8x - 2 = -9 + 7x$

4)  $a + 5 = -5a + 5$

5)  $4m - 4 = 4m$

6)  $p - 1 = 5p + 3p - 8$

7)  $5p - 14 = 8p + 4$

8)  $p - 4 = -9 + p$

9)  $-8 = -(x + 4)$

10)  $12 = -4(-6x - 3)$

11)  $14 = -(p - 8)$

12)  $-(7 - 4x) = 9$

13)  $-18 - 6k = 6(1 + 3k)$

14)  $5n + 34 = -2(1 - 7n)$

15)  $2(4x - 3) - 8 = 4 + 2x$

16)  $3n - 5 = -8(6 + 5n)$

17)  $-(1 + 7x) - 6(-7 - x) = 36$

18)  $-3(4x + 3) + 4(6x + 1) = 43$

19)  $24a - 22 = -4(1 - 6a)$

20)  $-5(1 - 5x) + 5(-8x - 2) = -4x - 8x$

## Multi-Step Equations

**Solve each equation.**

1)  $-20 = -4x - 6x$

 $\{2\}$ 

2)  $6 = 1 - 2n + 5$

 $\{0\}$ 

3)  $8x - 2 = -9 + 7x$

 $\{-7\}$ 

4)  $a + 5 = -5a + 5$

 $\{0\}$ 

5)  $4m - 4 = 4m$

No solution.

6)  $p - 1 = 5p + 3p - 8$

 $\{1\}$ 

7)  $5p - 14 = 8p + 4$

 $\{-6\}$ 

8)  $p - 4 = -9 + p$

No solution.

9)  $-8 = -(x + 4)$

 $\{4\}$ 

10)  $12 = -4(-6x - 3)$

 $\{0\}$ 

11)  $14 = -(p - 8)$

 $\{-6\}$ 

12)  $-(7 - 4x) = 9$

 $\{4\}$ 

13)  $-18 - 6k = 6(1 + 3k)$

 $\{-1\}$ 

14)  $5n + 34 = -2(1 - 7n)$

 $\{4\}$ 

15)  $2(4x - 3) - 8 = 4 + 2x$

 $\{3\}$ 

16)  $3n - 5 = -8(6 + 5n)$

 $\{-1\}$ 

17)  $-(1 + 7x) - 6(-7 - x) = 36$

 $\{5\}$ 

18)  $-3(4x + 3) + 4(6x + 1) = 43$

 $\{4\}$ 

19)  $24a - 22 = -4(1 - 6a)$

No solution.

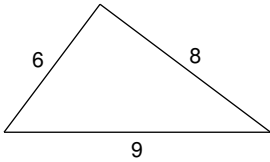
20)  $-5(1 - 5x) + 5(-8x - 2) = -4x - 8x$

 $\{-5\}$

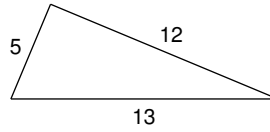
## The Pythagorean Theorem

Do the following lengths form a right triangle?

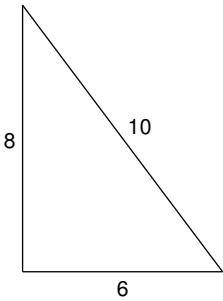
1)



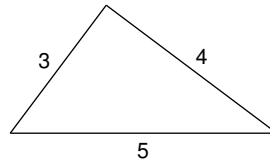
2)



3)

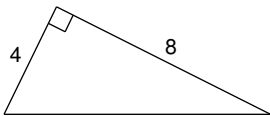


4)

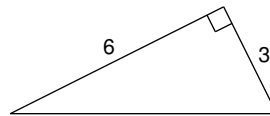
5)  $a = 6.4$ ,  $b = 12$ ,  $c = 12.2$ 6)  $a = 2.1$ ,  $b = 7.2$ ,  $c = 7.5$ 

Find each missing length to the nearest tenth.

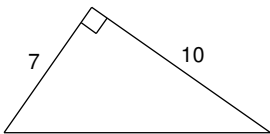
7)



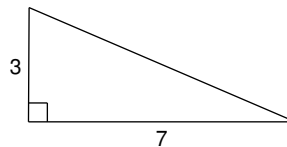
8)



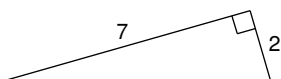
9)



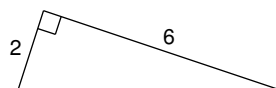
10)



11)

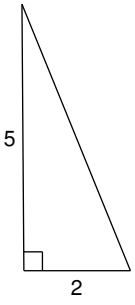


12)

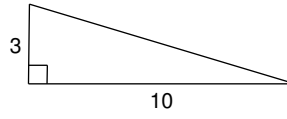




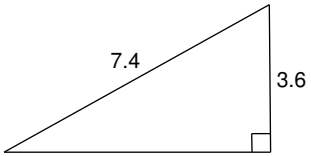
13)



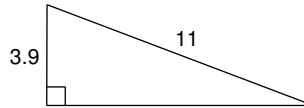
14)



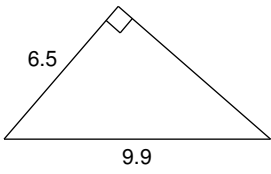
15)



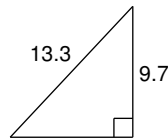
16)



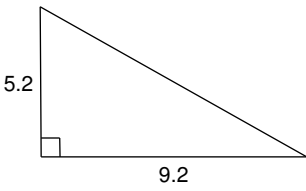
17)



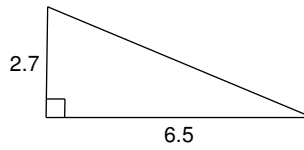
18)



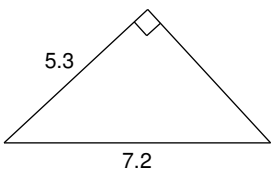
19)



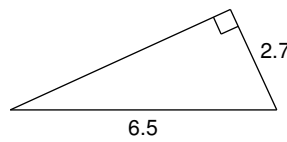
20)



21)



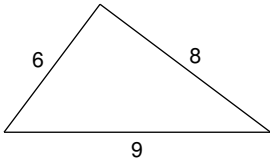
22)



## The Pythagorean Theorem

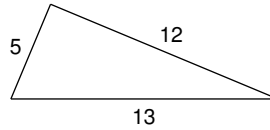
Do the following lengths form a right triangle?

1)



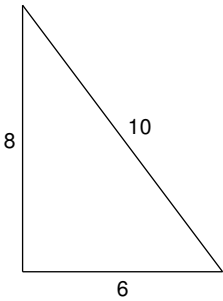
No

2)



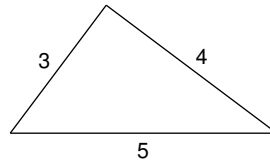
Yes

3)



Yes

4)



Yes

5)  $a = 6.4$ ,  $b = 12$ ,  $c = 12.2$ 

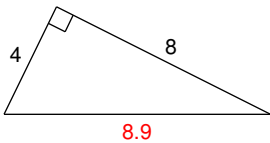
No

6)  $a = 2.1$ ,  $b = 7.2$ ,  $c = 7.5$ 

Yes

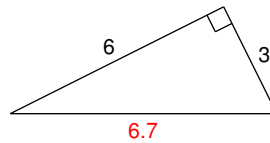
Find each missing length to the nearest tenth.

7)



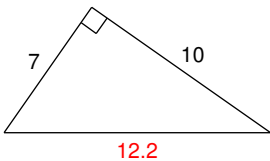
8.9

8)



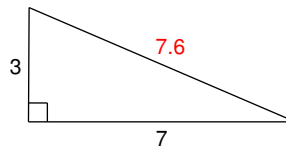
6.7

9)



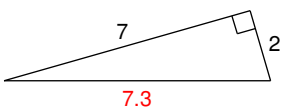
12.2

10)



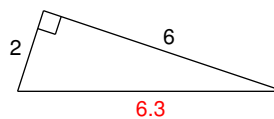
7

11)



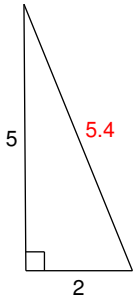
7.3

12)

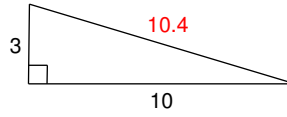


6.3

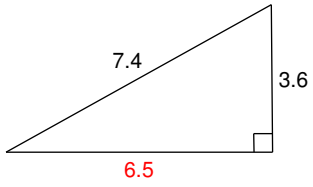
13)



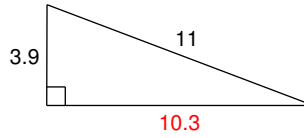
14)



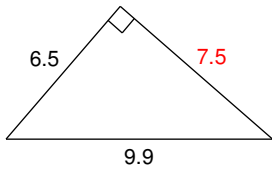
15)



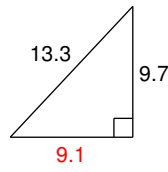
16)



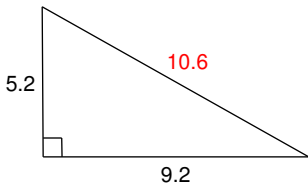
17)



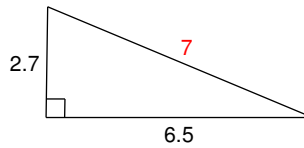
18)



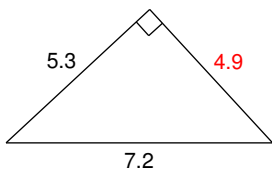
19)



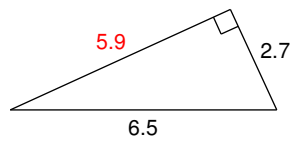
20)



21)



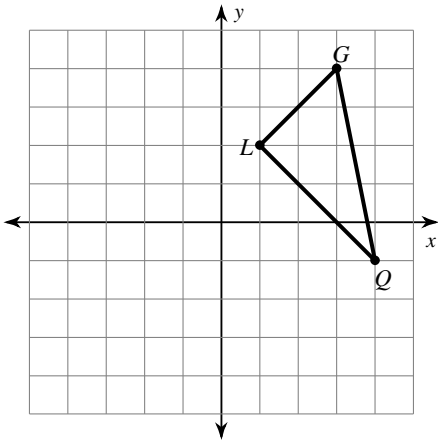
22)



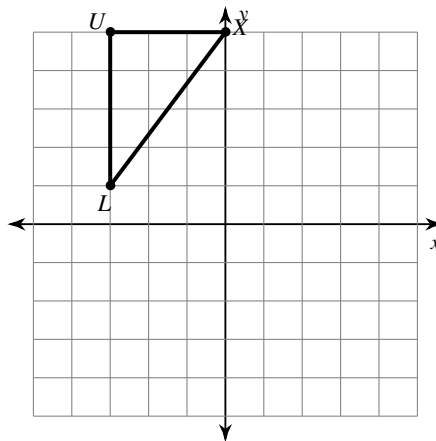
# Reflections of Shapes

Graph the image of the figure using the transformation given.

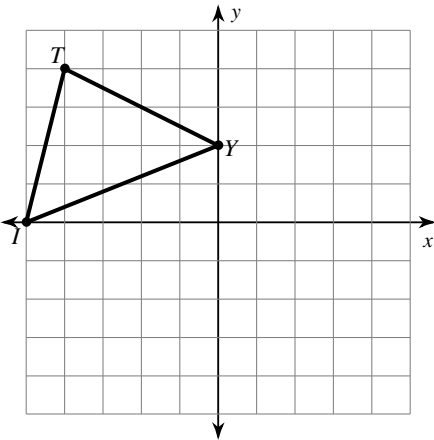
1) reflection across the x-axis



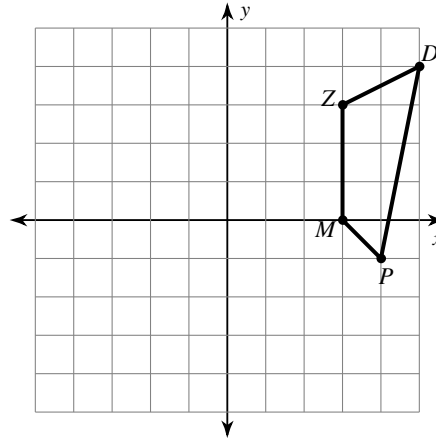
2) reflection across  $y = 3$



3) reflection across  $y = 1$

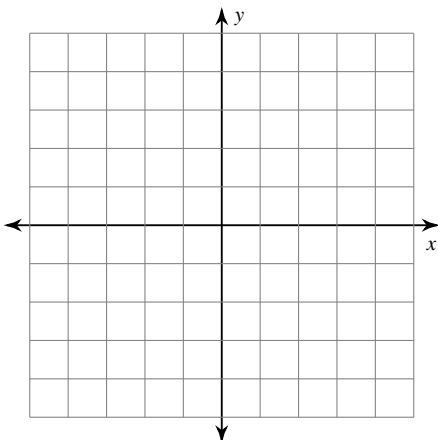


4) reflection across the x-axis



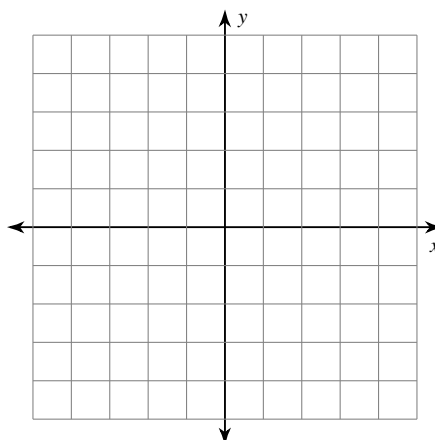
5) reflection across the x-axis

$T(2, 2), C(2, 5), Z(5, 4), F(5, 0)$



6) reflection across  $y = -2$

$H(-1, -5), M(-1, -4), B(1, -2), C(3, -3)$



**Find the coordinates of the vertices of each figure after the given transformation.**

7) reflection across the x-axis  
 $K(1, -1), N(4, 0), Q(4, -4)$

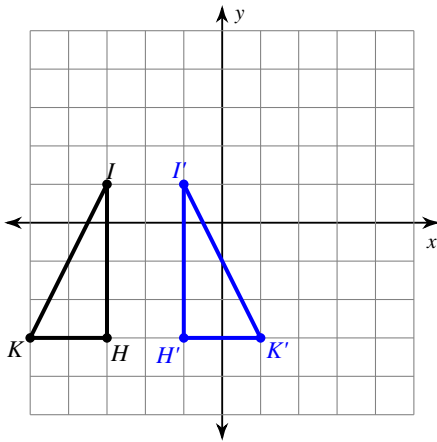
8) reflection across  $y = -1$   
 $R(-3, -5), N(-4, 0), V(-2, -1), E(0, -4)$

9) reflection across  $x = 3$   
 $F(2, 2), W(2, 5), K(3, 2)$

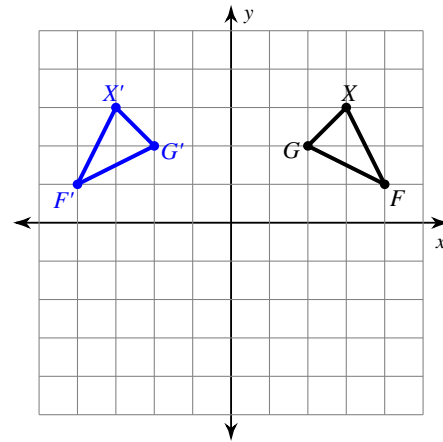
10) reflection across  $x = -1$   
 $V(-3, -1), Z(-3, 2), G(-1, 3), M(1, 1)$

**Write a rule to describe each transformation.**

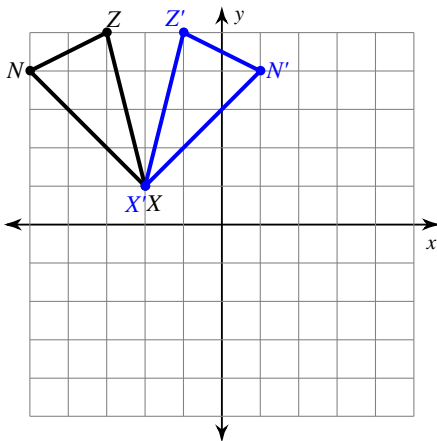
11)



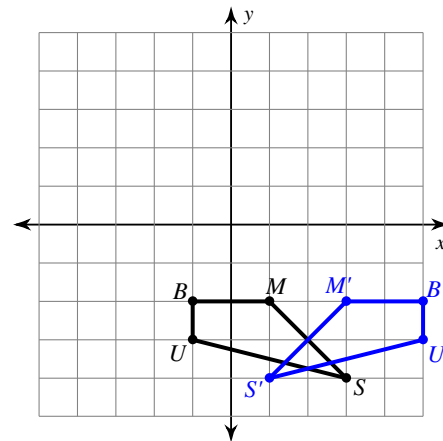
12)



13)



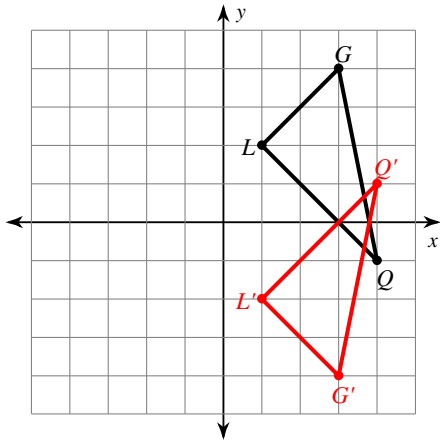
14)



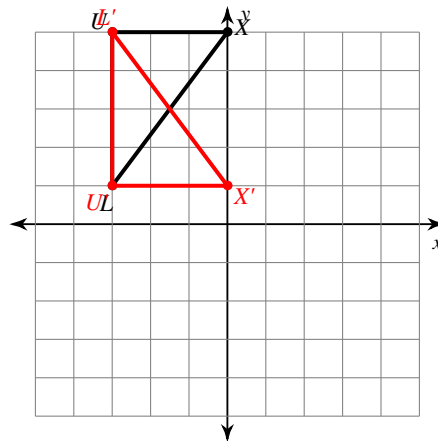
# Reflections of Shapes

Graph the image of the figure using the transformation given.

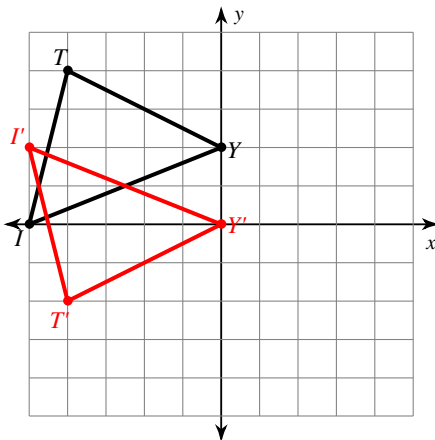
1) reflection across the x-axis



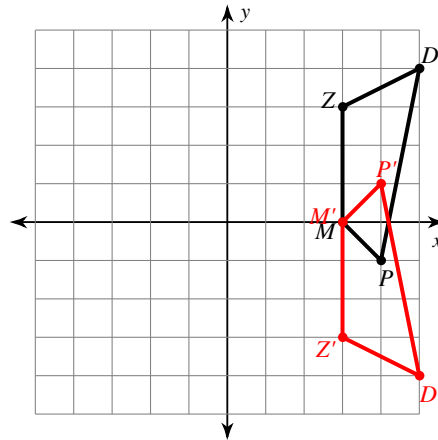
2) reflection across  $y = 3$



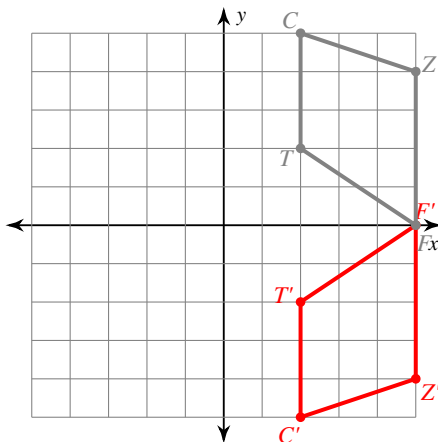
3) reflection across  $y = 1$



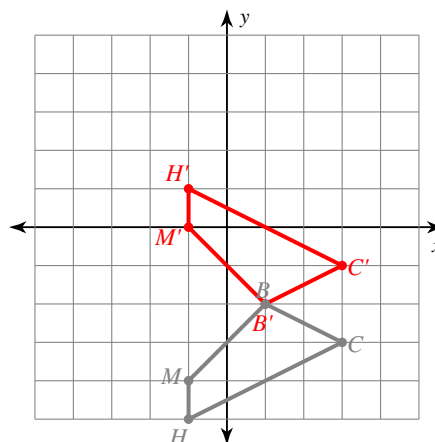
4) reflection across the x-axis



5) reflection across the x-axis  
 $T(2, 2)$ ,  $C(2, 5)$ ,  $Z(5, 4)$ ,  $F(5, 0)$



6) reflection across  $y = -2$   
 $H(-1, -5)$ ,  $M(-1, -4)$ ,  $B(1, -2)$ ,  $C(3, -3)$



**Find the coordinates of the vertices of each figure after the given transformation.**

7) reflection across the x-axis

$K(1, -1), N(4, 0), Q(4, -4)$

$N'(4, 0), Q'(4, 4), K'(1, 1)$

8) reflection across  $y = -1$

$R(-3, -5), N(-4, 0), V(-2, -1), E(0, -4)$

$N'(-4, -2), V'(-2, -1), E'(0, 2), R'(-3, 3)$

9) reflection across  $x = 3$

$F(2, 2), W(2, 5), K(3, 2)$

$W'(4, 5), K'(3, 2), F'(4, 2)$

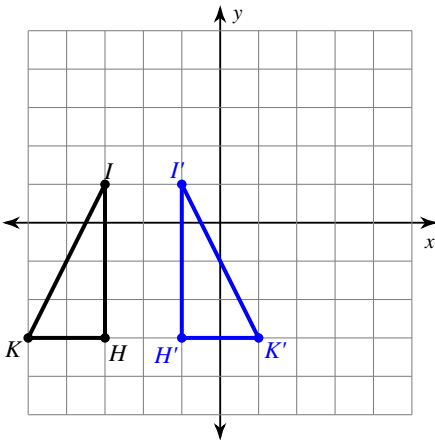
10) reflection across  $x = -1$

$V(-3, -1), Z(-3, 2), G(-1, 3), M(1, 1)$

$Z'(1, 2), G'(-1, 3), M'(-3, 1), V'(1, -1)$

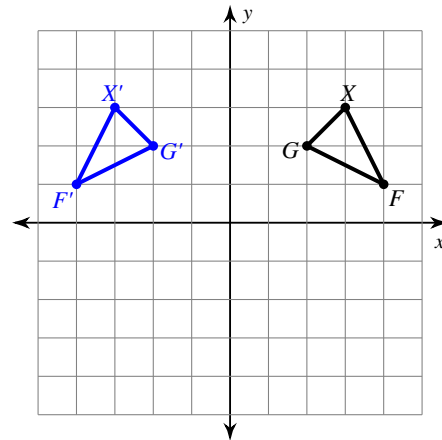
**Write a rule to describe each transformation.**

11)



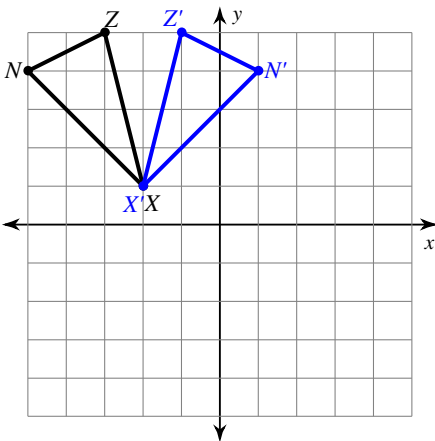
reflection across  $x = -2$

12)



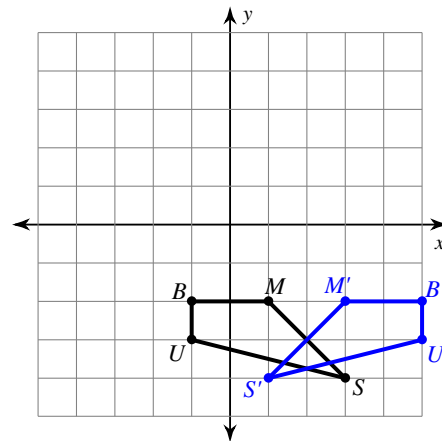
reflection across the y-axis

13)



reflection across  $x = -2$

14)

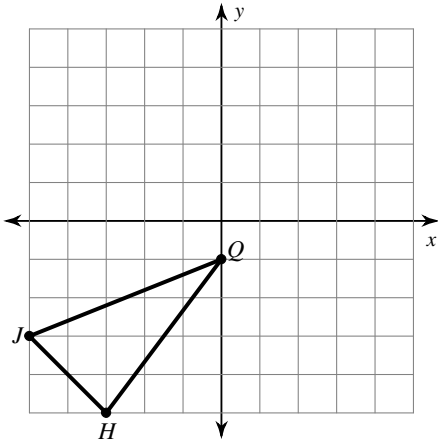


reflection across  $x = 2$

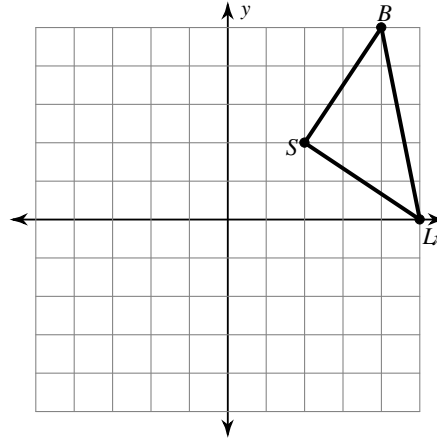
# Rotations of Shapes

**Graph the image of the figure using the transformation given.**

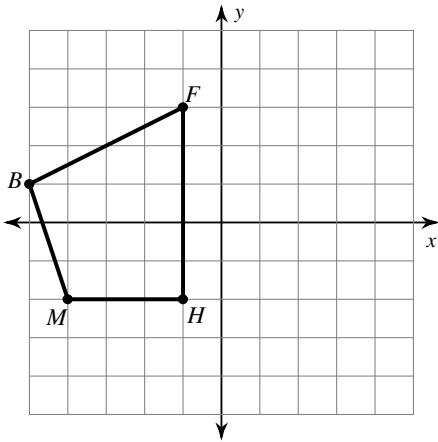
1) rotation  $180^\circ$  about the origin



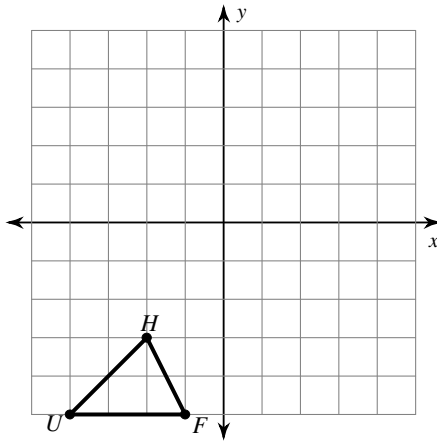
2) rotation  $90^\circ$  counterclockwise about the origin



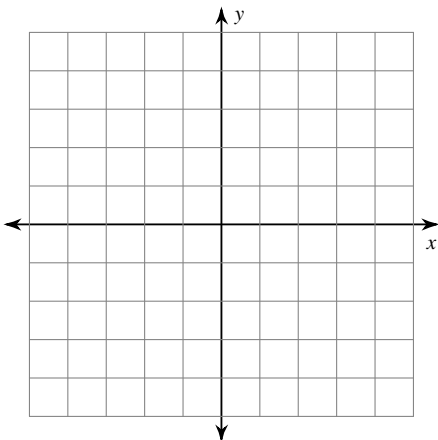
3) rotation  $90^\circ$  clockwise about the origin



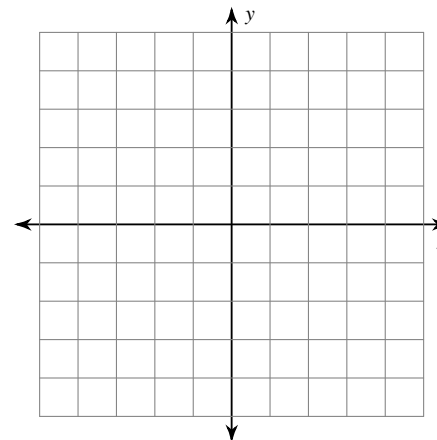
4) rotation  $180^\circ$  about the origin



5) rotation  $90^\circ$  clockwise about the origin  
 $U(1, -2), W(0, 2), K(3, 2), G(3, -3)$



6) rotation  $180^\circ$  about the origin  
 $V(2, 0), S(1, 3), G(5, 0)$





**Find the coordinates of the vertices of each figure after the given transformation.**

7) rotation  $180^\circ$  about the origin  
 $Z(-1, -5), K(-1, 0), C(1, 1), N(3, -2)$

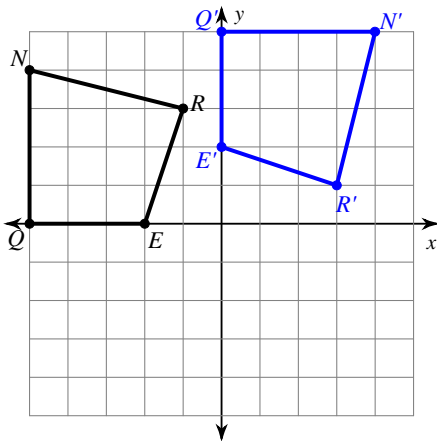
8) rotation  $180^\circ$  about the origin  
 $L(1, 3), Z(5, 5), F(4, 2)$

9) rotation  $90^\circ$  clockwise about the origin  
 $S(1, -4), W(1, 0), J(3, -4)$

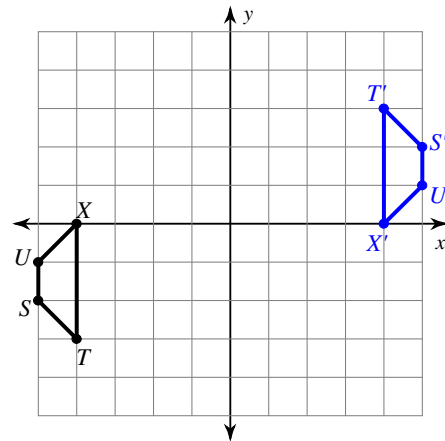
10) rotation  $180^\circ$  about the origin  
 $V(-5, -3), A(-3, 1), G(0, -3)$

**Write a rule to describe each transformation.**

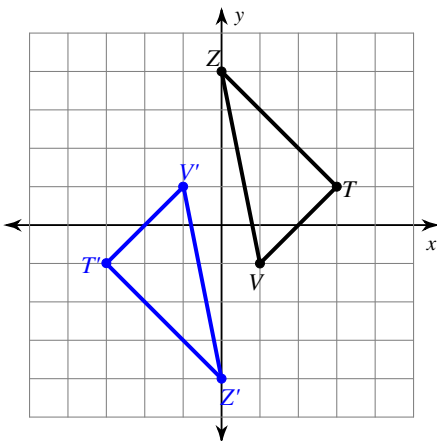
11)



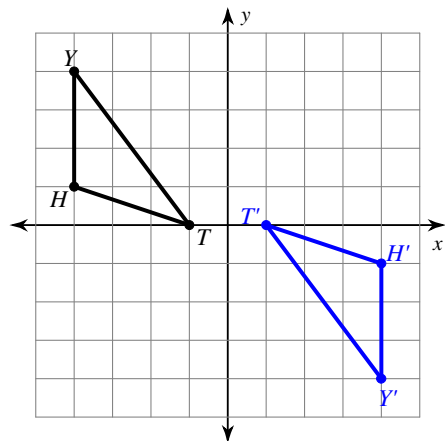
12)



13)



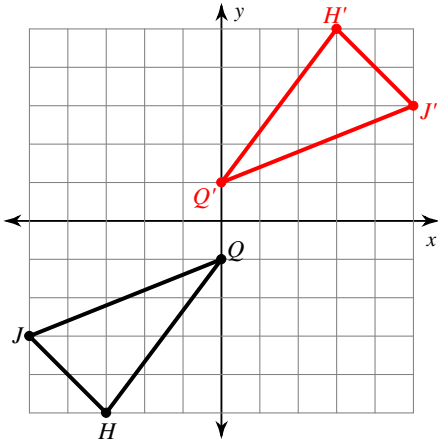
14)



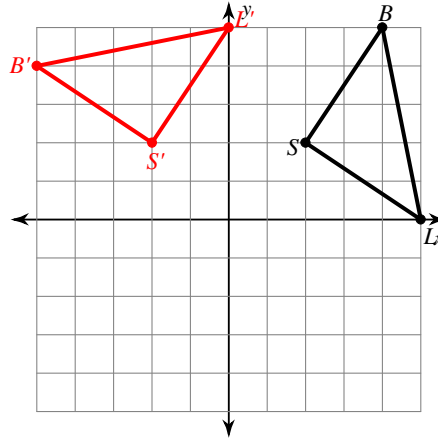
# Rotations of Shapes

**Graph the image of the figure using the transformation given.**

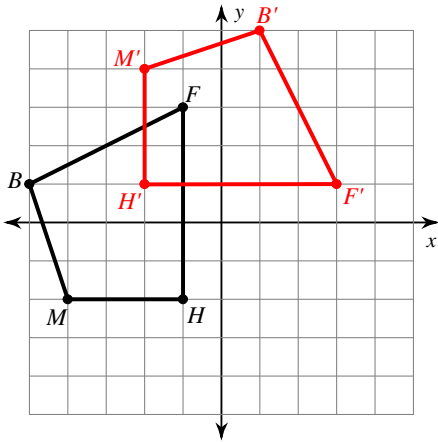
1) rotation  $180^\circ$  about the origin



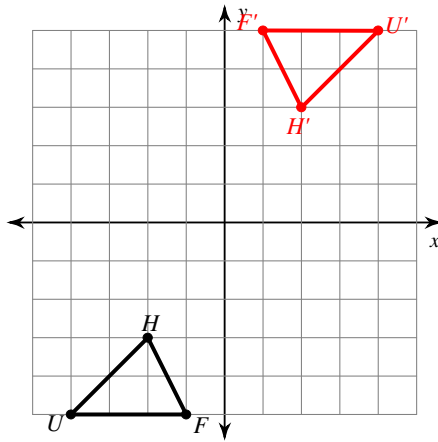
2) rotation  $90^\circ$  counterclockwise about the origin



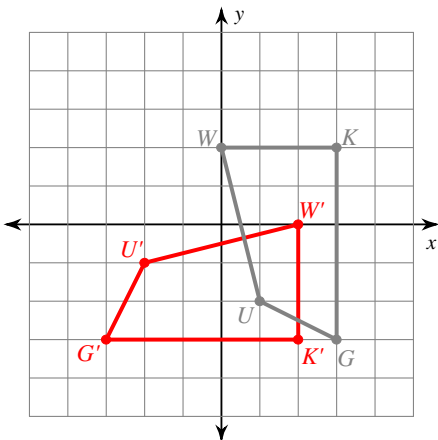
3) rotation  $90^\circ$  clockwise about the origin



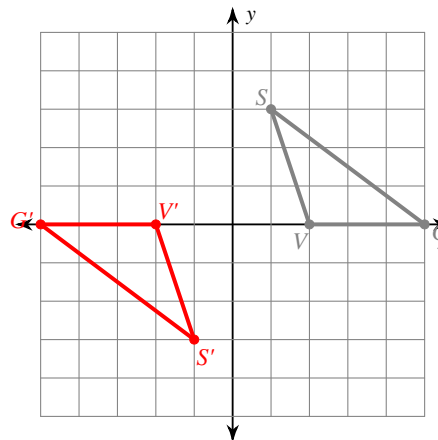
4) rotation  $180^\circ$  about the origin



5) rotation  $90^\circ$  clockwise about the origin  
 $U(1, -2)$ ,  $W(0, 2)$ ,  $K(3, 2)$ ,  $G(3, -3)$



6) rotation  $180^\circ$  about the origin  
 $V(2, 0)$ ,  $S(1, 3)$ ,  $G(5, 0)$



**Find the coordinates of the vertices of each figure after the given transformation.**

7) rotation  $180^\circ$  about the origin

$Z(-1, -5), K(-1, 0), C(1, 1), N(3, -2)$

$Z'(1, 5), K'(1, 0), C'(-1, -1), N'(-3, 2)$

9) rotation  $90^\circ$  clockwise about the origin

$S(1, -4), W(1, 0), J(3, -4)$

$S'(-4, -1), W'(0, -1), J'(-4, -3)$

8) rotation  $180^\circ$  about the origin

$L(1, 3), Z(5, 5), F(4, 2)$

$L'(-1, -3), Z'(-5, -5), F'(-4, -2)$

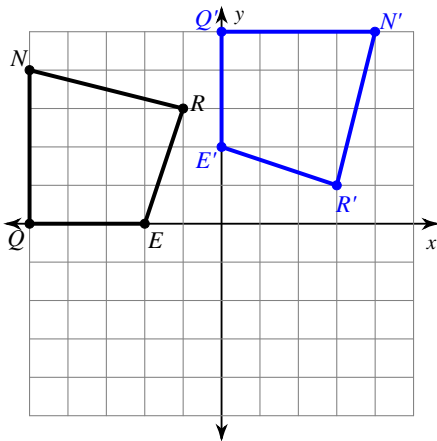
10) rotation  $180^\circ$  about the origin

$V(-5, -3), A(-3, 1), G(0, -3)$

$V'(5, 3), A'(3, -1), G'(0, 3)$

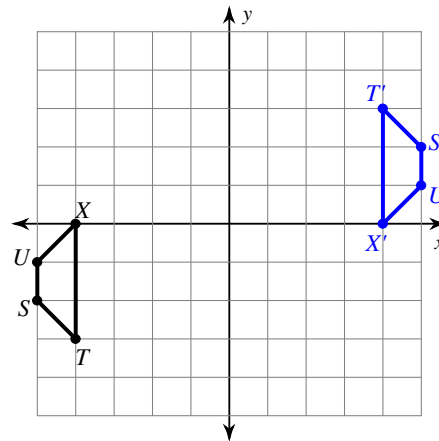
**Write a rule to describe each transformation.**

11)



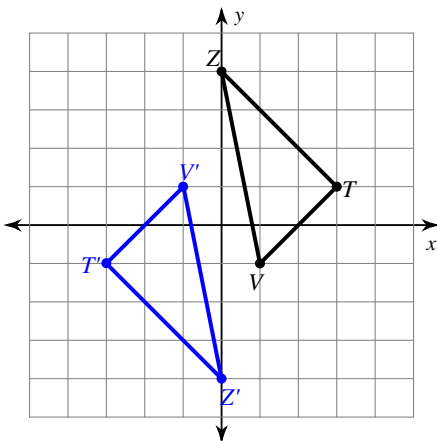
rotation  $90^\circ$  clockwise about the origin

12)



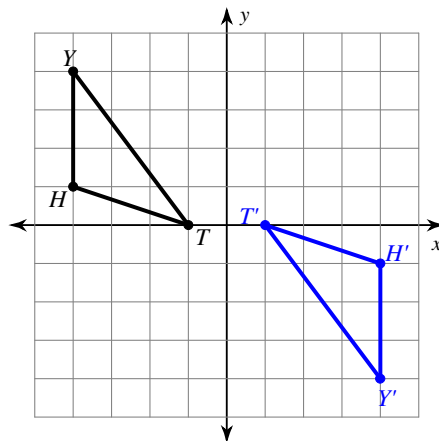
rotation  $180^\circ$  about the origin

13)



rotation  $180^\circ$  about the origin

14)



rotation  $180^\circ$  about the origin

## Simplifying Radical Expressions

**Simplify.**

1)  $\sqrt{125n}$

2)  $\sqrt{216v}$

3)  $\sqrt{512k^2}$

4)  $\sqrt{512m^3}$

5)  $\sqrt{216k^4}$

6)  $\sqrt{100v^3}$

7)  $\sqrt{80p^3}$

8)  $\sqrt{45p^2}$

9)  $\sqrt{147m^3n^3}$

10)  $\sqrt{200m^4n}$

11)  $\sqrt{75x^2y}$

12)  $\sqrt{64m^3n^3}$

13)  $\sqrt{16u^4v^3}$

14)  $\sqrt{28x^3y^3}$

15)  $\sqrt{36x^2y^3}$

16)  $\sqrt{384x^4y^3}$

17)  $7\sqrt{96m^3}$

18)  $6\sqrt{72x^2}$

19)  $-6\sqrt{150r}$

20)  $5\sqrt{80a^2}$

21)  $2\sqrt{125v}$

22)  $-8\sqrt{24k^3}$

23)  $-4\sqrt{192x}$

24)  $2\sqrt{8p^2q^3r}$

25)  $-4\sqrt{216x^2y^2z}$

26)  $-3\sqrt{24a^4b^2c^3}$

27)  $3\sqrt{16x^4y^4z}$

28)  $-2\sqrt{48a^3b^4c^2}$

29)  $6\sqrt{75mp^2q^3}$

30)  $4\sqrt{36x^2y^3z^4}$

## Simplifying Radical Expressions

**Simplify.**

1)  $\sqrt{125n}$   
 $5\sqrt{5n}$

2)  $\sqrt{216v}$   
 $6\sqrt{6v}$

3)  $\sqrt{512k^2}$   
 $16k\sqrt{2}$

4)  $\sqrt{512m^3}$   
 $16m\sqrt{2m}$

5)  $\sqrt{216k^4}$   
 $6k^2\sqrt{6}$

6)  $\sqrt{100v^3}$   
 $10v\sqrt{v}$

7)  $\sqrt{80p^3}$   
 $4p\sqrt{5p}$

8)  $\sqrt{45p^2}$   
 $3p\sqrt{5}$

9)  $\sqrt{147m^3n^3}$   
 $7m \cdot n\sqrt{3mn}$

10)  $\sqrt{200m^4n}$   
 $10m^2\sqrt{2n}$

11)  $\sqrt{75x^2y}$   
 $5x\sqrt{3y}$

12)  $\sqrt{64m^3n^3}$   
 $8m \cdot n\sqrt{mn}$

13)  $\sqrt{16u^4v^3}$   
 $4u^2 \cdot v\sqrt{v}$

14)  $\sqrt{28x^3y^3}$   
 $2x \cdot y\sqrt{7xy}$

$$15) \sqrt{36x^2y^3}$$
$$6x \cdot y\sqrt{y}$$

$$16) \sqrt{384x^4y^3}$$
$$8x^2 \cdot y\sqrt{6y}$$

$$17) 7\sqrt{96m^3}$$
$$28m\sqrt{6m}$$

$$18) 6\sqrt{72x^2}$$
$$36x\sqrt{2}$$

$$19) -6\sqrt{150r}$$
$$-30\sqrt{6r}$$

$$20) 5\sqrt{80a^2}$$
$$20a\sqrt{5}$$

$$21) 2\sqrt{125v}$$
$$10\sqrt{5v}$$

$$22) -8\sqrt{24k^3}$$
$$-16k\sqrt{6k}$$

$$23) -4\sqrt{192x}$$
$$-32\sqrt{3x}$$

$$24) 2\sqrt{8p^2q^3r}$$
$$4p \cdot q\sqrt{2qr}$$

$$25) -4\sqrt{216x^2y^2z}$$
$$-24x \cdot y\sqrt{6z}$$

$$26) -3\sqrt{24a^4b^2c^3}$$
$$-6a^2 \cdot b \cdot c\sqrt{6c}$$

$$27) 3\sqrt{16x^4y^4z}$$
$$12x^2y^2\sqrt{z}$$

$$28) -2\sqrt{48a^3b^4c^2}$$
$$-8b^2 \cdot a \cdot c\sqrt{3a}$$

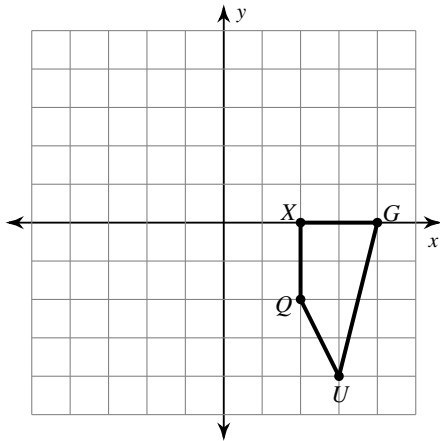
$$29) 6\sqrt{75mp^2q^3}$$
$$30p \cdot q\sqrt{3mq}$$

$$30) 4\sqrt{36x^2y^3z^4}$$
$$24z^2 \cdot x \cdot y\sqrt{y}$$

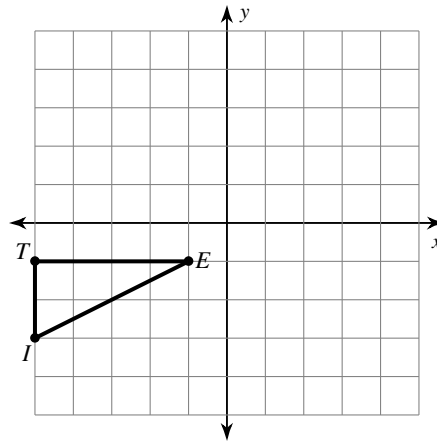
# Translations of Shapes

**Graph the image of the figure using the transformation given.**

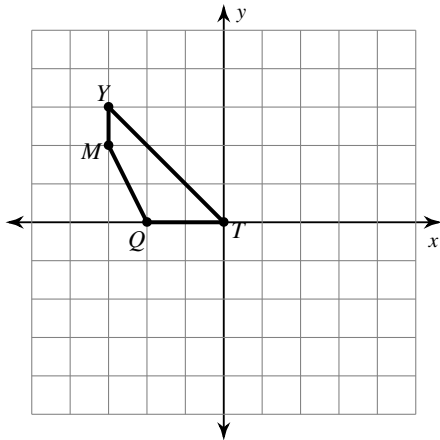
1) translation: 1 unit left



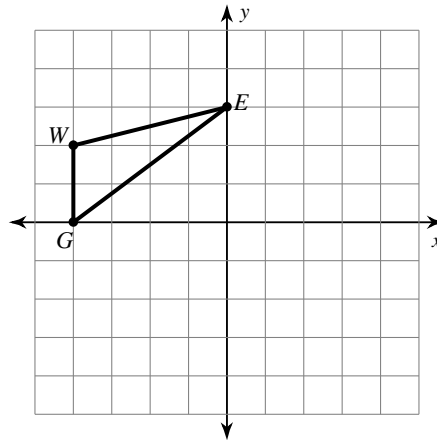
2) translation: 1 unit right and 2 units down



3) translation: 3 units right

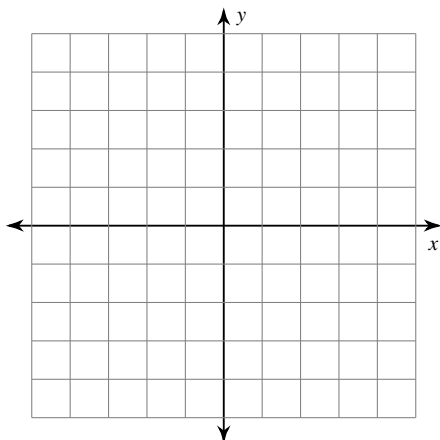


4) translation: 1 unit right and 2 units down



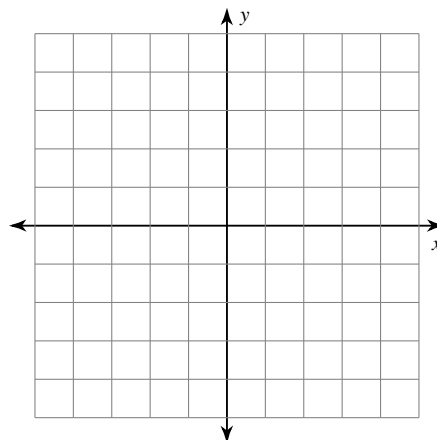
5) translation: 5 units up

$U(-3, -4), M(-1, -1), L(-2, -5)$



6) translation: 3 units up

$R(-4, -3), D(-4, 0), L(0, 0), F(0, -3)$





**Find the coordinates of the vertices of each figure after the given transformation.**

7) translation: 2 units left and 1 unit down  
 $Q(0, -1), D(-2, 2), V(2, 4), J(3, 0)$

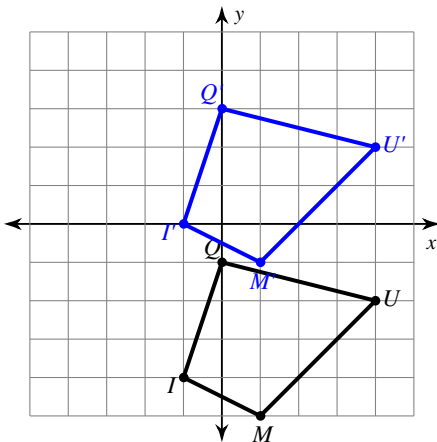
8) translation: 2 units down  
 $D(-4, 1), A(-2, 5), S(-1, 4), N(-1, 2)$

9) translation: 4 units left and 4 units up  
 $J(-1, -2), A(-1, 0), N(3, -3)$

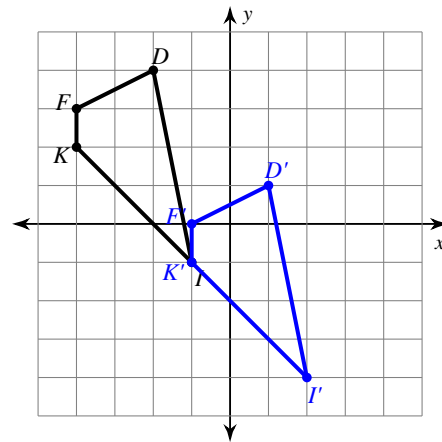
10) translation: 3 units right and 4 units up  
 $Z(-4, -3), I(-2, -2), V(-2, -4)$

**Write a rule to describe each transformation.**

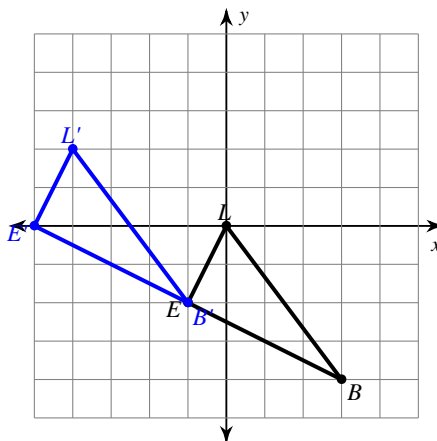
11)



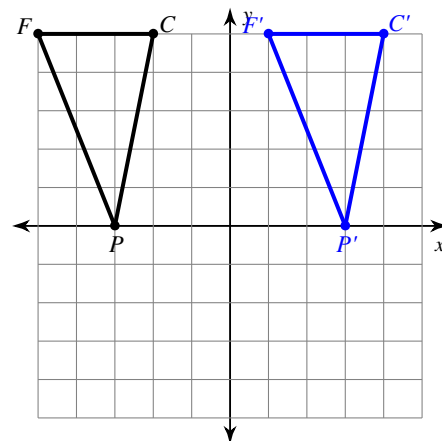
12)



13)



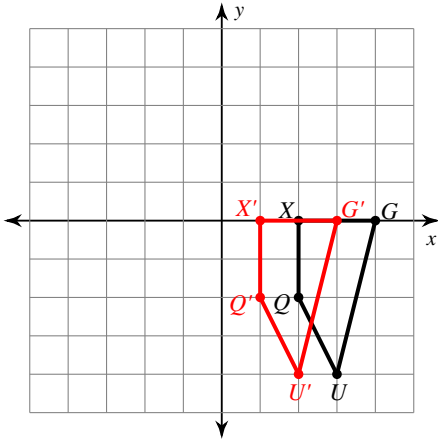
14)



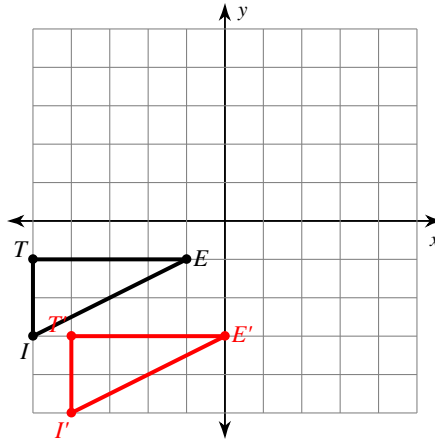
# Translations of Shapes

Graph the image of the figure using the transformation given.

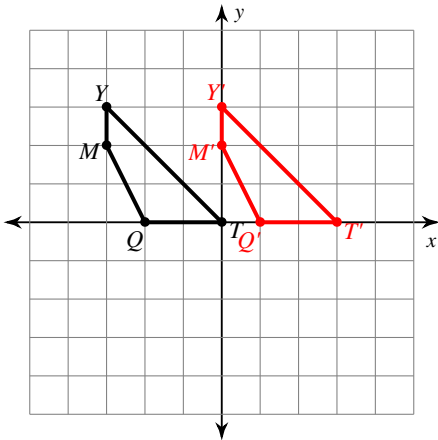
1) translation: 1 unit left



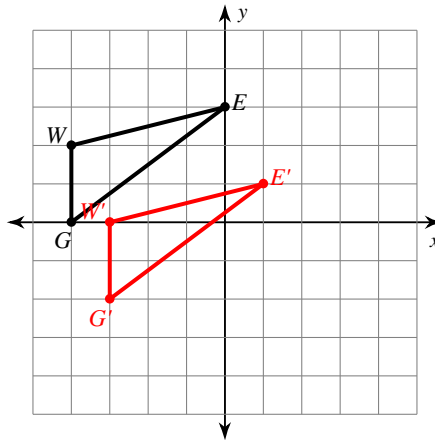
2) translation: 1 unit right and 2 units down



3) translation: 3 units right

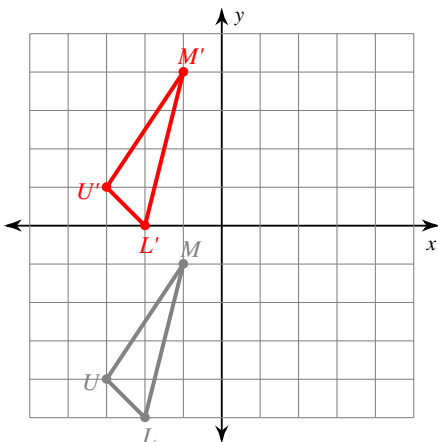


4) translation: 1 unit right and 2 units down



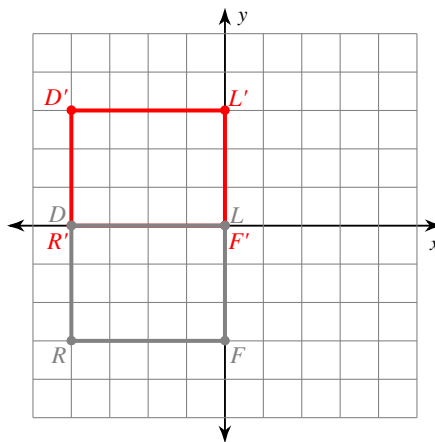
5) translation: 5 units up

$U(-3, -4), M(-1, -1), L(-2, -5)$



6) translation: 3 units up

$R(-4, -3), D(-4, 0), L(0, 0), F(0, -3)$



**Find the coordinates of the vertices of each figure after the given transformation.**

7) translation: 2 units left and 1 unit down  
 $Q(0, -1), D(-2, 2), V(2, 4), J(3, 0)$

$Q'(-2, -2), D'(-4, 1), V'(0, 3), J'(1, -1)$

8) translation: 2 units down  
 $D(-4, 1), A(-2, 5), S(-1, 4), N(-1, 2)$

$D'(-4, -1), A'(-2, 3), S'(-1, 2), N'(-1, 0)$

9) translation: 4 units left and 4 units up  
 $J(-1, -2), A(-1, 0), N(3, -3)$

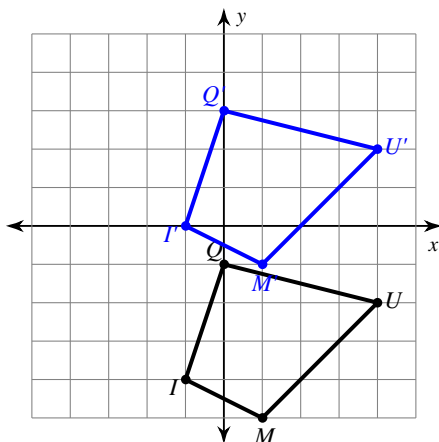
$J'(-5, 2), A'(-5, 4), N'(-1, 1)$

10) translation: 3 units right and 4 units up  
 $Z(-4, -3), I(-2, -2), V(-2, -4)$

$Z'(-1, 1), I'(1, 2), V'(1, 0)$

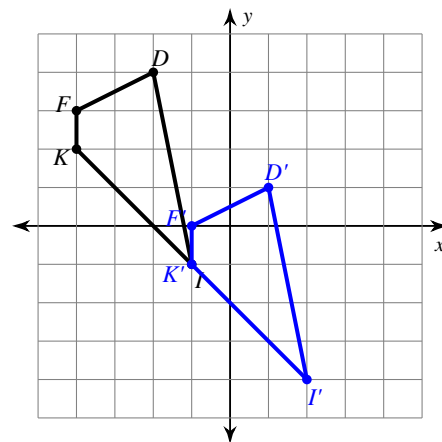
**Write a rule to describe each transformation.**

11)



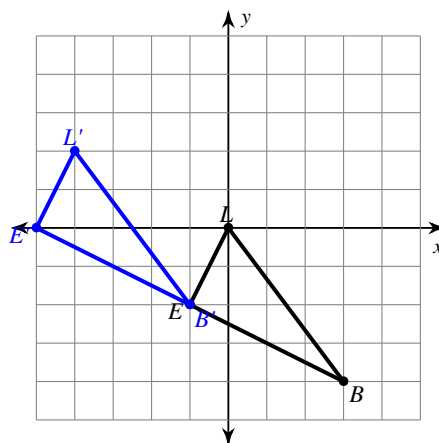
translation: 2 units right

12)



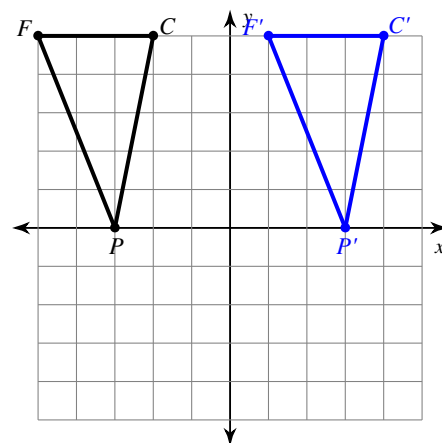
translation: 3 units left

13)



translation: 4 units left

14)



translation: 6 units left

## Two-Step Equations

**Solve each equation.**

1)  $6 = \frac{a}{4} + 2$

2)  $-6 + \frac{x}{4} = -5$

3)  $9x - 7 = -7$

4)  $0 = 4 + \frac{n}{5}$

5)  $-4 = \frac{r}{20} - 5$

6)  $-1 = \frac{5 + x}{6}$

7)  $\frac{v + 9}{3} = 8$

8)  $2(n + 5) = -2$

9)  $-9x + 1 = -80$

10)  $-6 = \frac{n}{2} - 10$

11)  $-2 = 2 + \frac{v}{4}$

12)  $144 = -12(x + 5)$

$$13) -15 = -4m + 5$$

$$14) 10 - 6v = -104$$

$$15) 8n + 7 = 31$$

$$16) -9x - 13 = -103$$

$$17) \frac{n + 5}{-16} = -1$$

$$18) -10 = -10 + 7m$$

$$19) -10 = 10(k - 9)$$

$$20) \frac{m}{9} - 1 = -2$$

$$21) 9 + 9n = 9$$

$$22) 7(9 + k) = 84$$

$$23) 8 + \frac{b}{-4} = 5$$

$$24) -243 = -9(10 + x)$$

## Two-Step Equations

**Solve each equation.**

1)  $6 = \frac{a}{4} + 2$

 $\{16\}$ 

2)  $-6 + \frac{x}{4} = -5$

 $\{4\}$ 

3)  $9x - 7 = -7$

 $\{0\}$ 

4)  $0 = 4 + \frac{n}{5}$

 $\{-20\}$ 

5)  $-4 = \frac{r}{20} - 5$

 $\{20\}$ 

6)  $-1 = \frac{5+x}{6}$

 $\{-11\}$ 

7)  $\frac{v+9}{3} = 8$

 $\{15\}$ 

8)  $2(n+5) = -2$

 $\{-6\}$ 

9)  $-9x + 1 = -80$

 $\{9\}$ 

10)  $-6 = \frac{n}{2} - 10$

 $\{8\}$ 

11)  $-2 = 2 + \frac{v}{4}$

 $\{-16\}$ 

12)  $144 = -12(x+5)$

 $\{-17\}$

$$13) -15 = -4m + 5$$

{5}

$$14) 10 - 6v = -104$$

{19}

$$15) 8n + 7 = 31$$

{3}

$$16) -9x - 13 = -103$$

{10}

$$17) \frac{n + 5}{-16} = -1$$

{11}

$$18) -10 = -10 + 7m$$

{0}

$$19) -10 = 10(k - 9)$$

{8}

$$20) \frac{m}{9} - 1 = -2$$

{-9}

$$21) 9 + 9n = 9$$

{0}

$$22) 7(9 + k) = 84$$

{3}

$$23) 8 + \frac{b}{-4} = 5$$

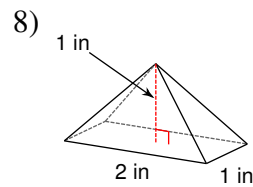
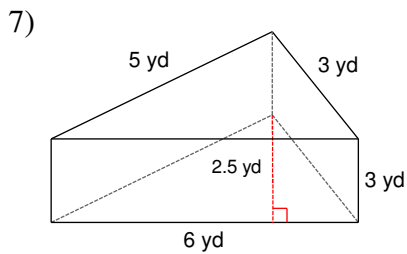
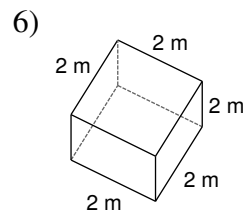
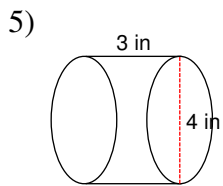
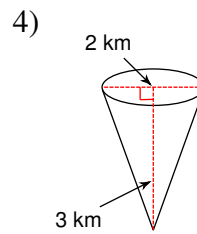
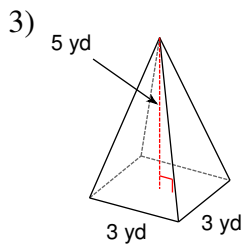
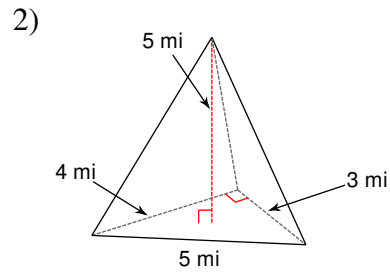
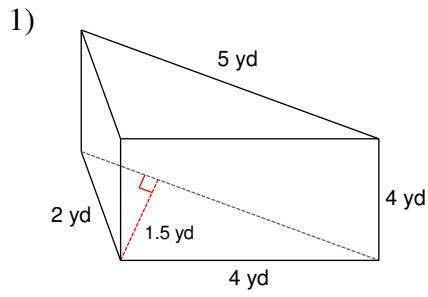
{12}

$$24) -243 = -9(10 + x)$$

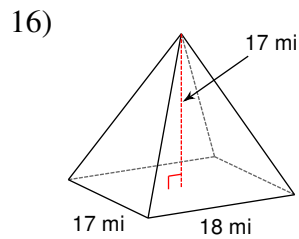
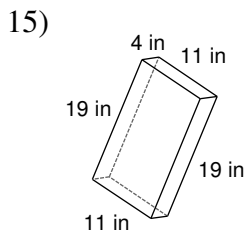
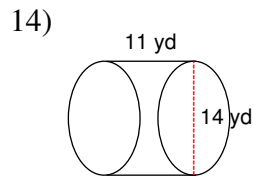
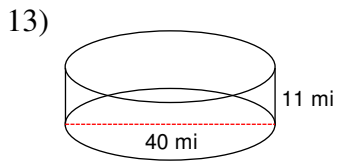
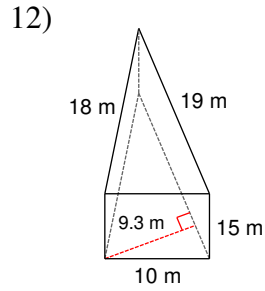
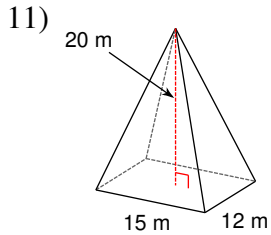
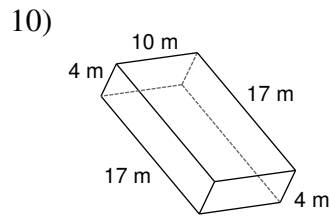
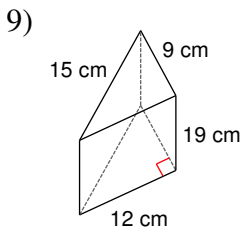
{17}

# Volumes of Solids

Find the volume of each figure. Round to the nearest tenth.







17) A cylinder with a radius of 3 cm and a height of 7 cm.

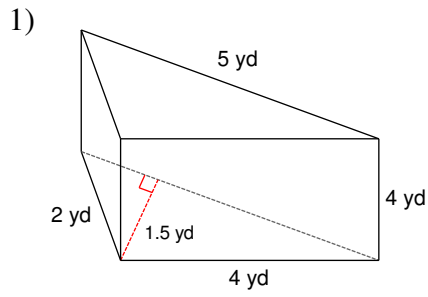
18) A cone with diameter 20 cm and a height of 20 cm.

19) A cone with diameter 14 yd and a height of 14 yd.

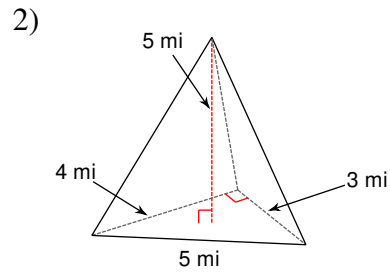
20) A rectangular prism measuring 10 m and 7 m along the base and 12 m tall.

# Volumes of Solids

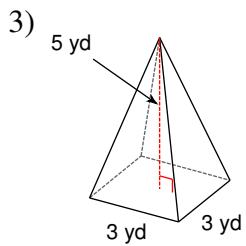
Find the volume of each figure. Round to the nearest tenth.



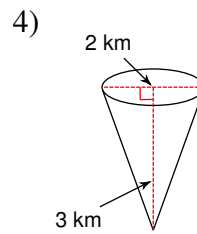
$15 \text{ yd}^3$



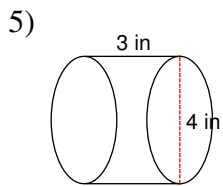
$10 \text{ mi}^3$



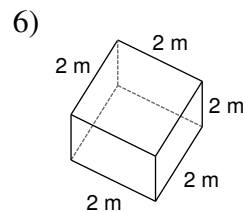
$15 \text{ yd}^3$



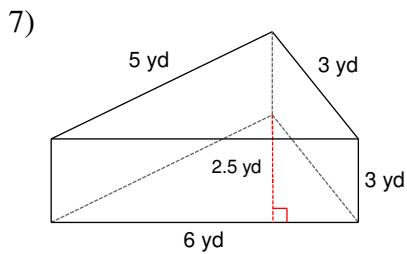
$3.1 \text{ km}^3$



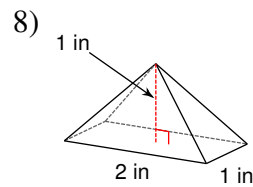
$37.7 \text{ in}^3$



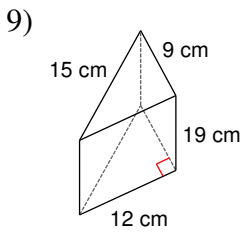
$8 \text{ m}^3$



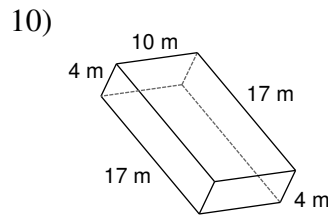
$22.5 \text{ yd}^3$



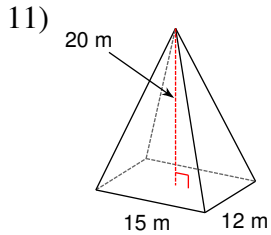
$0.7 \text{ in}^3$



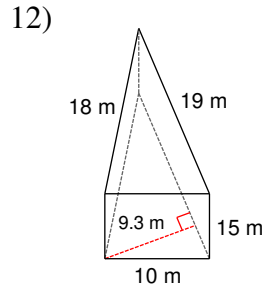
$1026 \text{ cm}^3$



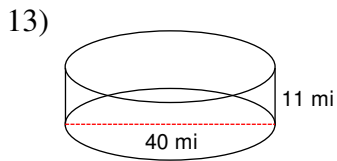
$680 \text{ m}^3$



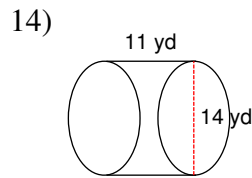
$1200 \text{ m}^3$



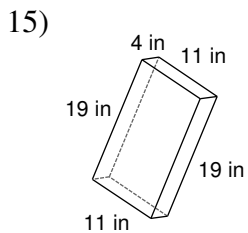
$1325.3 \text{ m}^3$



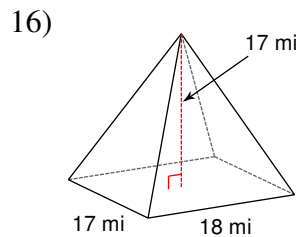
$13823 \text{ mi}^3$



$1693.3 \text{ yd}^3$



$836 \text{ in}^3$



$1734 \text{ mi}^3$

17) A cylinder with a radius of 3 cm and a height of 7 cm.

$197.9 \text{ cm}^3$

18) A cone with diameter 20 cm and a height of 20 cm.

$2094.4 \text{ cm}^3$

19) A cone with diameter 14 yd and a height of 14 yd.

$718.4 \text{ yd}^3$

20) A rectangular prism measuring 10 m and 7 m along the base and 12 m tall.

$840 \text{ m}^3$

Summer Reading in Math! I have read most of these books and found them enjoyable, interesting and extremely useful in everyday life. Keep math on your mind this summer and pick one out. It may surprise you how much you enjoy it.

1. **Secrets of Mental Math: The Mathemagician's Guide to Lightning Calculation and Amazing Math Tricks** [Paperback]

By Arthur Benjamin

These simple math secrets and tricks will forever change how you look at the world of numbers. Secrets of Mental Math will have you thinking like a math genius in no time. Get ready to amaze your friends—and yourself—with incredible calculations you never thought you could master, as renowned “mathemagician” Arthur Benjamin shares his techniques for lightning-quick calculations and amazing number tricks. This book will teach you to do math in your head faster than you ever thought possible, dramatically improve your memory for numbers, and—maybe for the first time—make mathematics fun.

Yes, even you can learn to do seemingly complex equations in your head; all you need to learn are a few tricks. You'll be able to quickly multiply and divide triple digits, compute with fractions, and determine squares, cubes, and roots without blinking an eye. No matter what your age or current math ability, Secrets of Mental Math will allow you to perform fantastic feats of the mind effortlessly. This is the math they never taught you in school.

2. **The Tipping Point: How Little Things Can Make a Big Difference**

By Malcolm Gladwell

The tipping point is that magic moment when an idea, trend, or social behavior crosses a threshold, tips, and spreads like wildfire. Just as a single sick person can start an epidemic of the flu, so too can a small but precisely targeted push cause a fashion trend, the popularity of a new product, or a drop in the crime rate. This widely acclaimed bestseller, in which Malcolm Gladwell explores and brilliantly illuminates the tipping point phenomenon, is already changing the way people throughout the world think about selling products and disseminating ideas.

### **3. Blink: The Power of Thinking Without Thinking**

By Malcolm Gladwell

In his landmark bestseller *The Tipping Point*, Malcolm Gladwell redefined how we understand the world around us. Now, in *Blink*, he revolutionizes the way we understand the world within.

*Blink* is a book about how we think without thinking, about choices that seem to be made in an instant-in the blink of an eye-that actually aren't as simple as they seem. Why are some people brilliant decision makers, while others are consistently inept? Why do some people follow their instincts and win, while others end up stumbling into error? How do our brains really work-in the office, in the classroom, in the kitchen, and in the bedroom? And why are the best decisions often those that are impossible to explain to others?

In *Blink* we meet the psychologist who has learned to predict whether a marriage will last, based on a few minutes of observing a couple; the tennis coach who knows when a player will double-fault before the racket even makes contact with the ball; the antiques experts who recognize a fake at a glance. Here, too, are great failures of "blink": the election of Warren Harding; "New Coke"; and the shooting of Amadou Diallo by police.

*Blink* reveals that great decision makers aren't those who process the most information or spend the most time deliberating, but those who have perfected the art of "thin-slicing"-filtering the very few factors that matter from an overwhelming number of variables.

### **4. Outliers: The Story of Success**

By Malcolm Gladwell

In this stunning new book, Malcolm Gladwell takes us on an intellectual journey through the world of "outliers"--the best and the brightest, the most famous and the most successful. He asks the question: what makes high-achievers different?

His answer is that we pay too much attention to what successful people are like, and too little attention to where they are from: that is, their culture, their family, their generation, and the idiosyncratic experiences of their upbringing. Along the way he explains the secrets of software billionaires, what it takes to be a great soccer player, why Asians are good at math, and what made the Beatles the greatest rock band.

Brilliant and entertaining, *Outliers* is a landmark work that will simultaneously delight and illuminate.

### **5. Imaginary Numbers** [Kindle Edition]

By P.K. Gardner

If Daniel can draw a connection between imaginary numbers and his imaginary roommate, maybe he can prove his sanity.

## **6. The Number Devil: A Mathematical Adventure**

By Hans Magnus Enzensberger

The international best-seller that makes mathematics a thrilling exploration.

In twelve dreams, Robert, a boy who hates math, meets a Number Devil, who leads him to discover the amazing world of numbers: infinite numbers, prime numbers, Fibonacci numbers, numbers that magically appear in triangles, and numbers that expand without. As we dream with him, we are taken further and further into mathematical theory, where ideas eventually take flight, until everyone—from those who fumble over fractions to those who solve complex equations in their heads—winds up marveling at what numbers can do.

Hans Magnus Enzensberger is a true polymath, the kind of superb intellectual who loves thinking and marshals all of his charm and wit to share his passions with the world. In *The Number Devil*, he brings together the surreal logic of Alice in Wonderland and the existential geometry of Flatland with the kind of math everyone would love, if only they had a number devil to teach it to them.

## **Flatland**

By Edwin A. Abbott

Flatland is one of the very few novels about math and philosophy that can appeal to almost any layperson. Published in 1880, this short fantasy takes us to a completely flat world of two physical dimensions where all the inhabitants are geometric shapes, and who think the planar world of length and width that they know is all there is. But one inhabitant discovers the existence of a third physical dimension, enabling him to finally grasp the concept of a fourth dimension. Watching our Flatland narrator, we begin to get an idea of the limitations of our own assumptions about reality, and we start to learn how to think about the confusing problem of higher dimensions. The book is also quite a funny satire on society and class distinctions of Victorian England.

## **8. How To Lie With Statistics**

By Darrell Huff

"There is terror in numbers," writes Darrell Huff in *How to Lie with Statistics*. And nowhere does this terror translate to blind acceptance of authority more than in the slippery world of averages, correlations, graphs, and trends. Huff sought to break through "the daze that follows the collision of statistics with the human mind" with this slim volume, first published in 1954. The book remains relevant as a wake-up call for people unaccustomed to examining the endless flow of numbers pouring from Wall Street, Madison Avenue, and everywhere else someone has an axe to grind, a point to prove, or a product to sell. "The secret language of statistics, so appealing in a fact-minded culture, is employed to sensationalize, inflate, confuse, and oversimplify," warns Huff.

Although many of the examples used in the book are charmingly dated, the cautions are timeless. Statistics are rife with opportunities for misuse, from "gee-whiz graphs" that add

nonexistent drama to trends, to "results" detached from their method and meaning, to statistics' ultimate bugaboo--faulty cause-and-effect reasoning. Huff's tone is tolerant and amused, but no-nonsense. Like a lecturing father, he expects you to learn something useful from the book, and start applying it every day. Never be a sucker again, he cries!

Even if you can't find a source of demonstrable bias, allow yourself some degree of skepticism about the results as long as there is a possibility of bias somewhere. There always is.

### **9. The Complete How to Figure It: Using Math in Everyday Life**

By Darrell Huff

An all-in-one compendium of easy techniques for all kinds of calculations, from personal finance to home improvement.

Budgeting and personal finance, planning for retirement, buying a house, estimating travel and leisure expenses, estimating costs of home repair: modern life presents us with an array of calculations we need to make but may not know how. Now, with his trademark wry humor and simple language, Darrell Huff explains how to figure: the likely outcome of different investments; how much home insurance is enough; whether it makes more sense to buy or lease a new car; the most efficient way to save for future needs, from vacations to college tuition; air-conditioning and heating requirements for a new house; how many rolls of wallpaper you will need for a particular room; and much more. Here are tips for getting the most out of a modest pocket calculator or home computer to make tedious calculations easy, a handy chapter on "Math in a Hurry," and even tips on improving your chances in tennis, horse racing, and blackjack.

10. Find More Books on Amazon!

<http://www.amazon.com/Using-Literature-High-School-Class/lm/RL8RMFAIW7TYE>