

Integrated Math 7 summer work

These are the concepts and skills that are most important to bring into Integrated Math 7. Your ability to do the following problems will be a good indicator of how ready you are.

- Operations on decimals and fractions (without a calculator)
- Solving problems involving percents
- Order of operations (without a calculator)
- Solving one-step equations, with appropriate work shown
- Locating points in all quadrants of the coordinate plane

Operations on decimals and fractions (without a calculator)

keep fractions as fractions and decimals as decimals; show all results in simplest form

1) $2\frac{1}{6} + 2\frac{7}{8}$

7) $9\frac{1}{4} \div 2\frac{1}{4}$

2) $7\frac{1}{8} - 2\frac{3}{4}$

8) $5.038 + 2.96$

3) $\frac{5}{9} \div \frac{1}{3}$

9) $9.006 - 4.44$

4) $\frac{5}{16} \cdot \frac{4}{5}$

10) $4.8 * 6.9$

5) $5\frac{1}{2} \cdot 4\frac{3}{4}$

12) $17.03 \div 9$

6) $5 \div \frac{2}{5}$

13) $4.82 \div 45$

14) $3.25 \div 0.5$

Solving problems involving percents

- 1) Out of 30 problems, Jerry answered 12 incorrectly. What percent did he answer correctly?

- 2) 2.85 kilograms of sugar is mixed with 3.15 kilograms of flour. What percent of the mixture is sugar?

- 3) 28% of the amount of Keith's savings is \$350. How much money does Keith have in savings?

- 4) Of the 1,640 students enrolled at a school, 50% come to school by bus, 35% come by car and the rest of the students walk. How many students walk to school?

- 5) Of the 400 people at the school carnival, 95% are students and the rest are teachers.
 - a. How many students are at the school carnival?

 - b. If 55% of the students at the school carnival are boys, how many are girls?

 - c. How many teachers are at the carnival?

 - d. If 35% of the teachers are male, and the rest are female, how many female teachers are there?

Order of operations (without a calculator)

1.) $[36 \div (3 \cdot 4)] + 2$

2.) $60 - 7(5 + 6 \div 2) + 2^4$

3.) $4 + 6(5 - 2)$

4.) $2 + 8 \cdot 3^2$

5.) $24 - 6 \cdot 2$

6.) $4 \cdot 9 + 7 \cdot 8$

7.) $102 - 2^4(3^4 - 51)$

8.) $14 + 8 \div 2 - 1$

Solving one-step equations, with appropriate work shown

1) $x - 8 = 15$

2) $x + 8 = 23$

3) $5x = 6$

4) $\frac{x}{8} = 6$

5) $1.3x = 3.25$

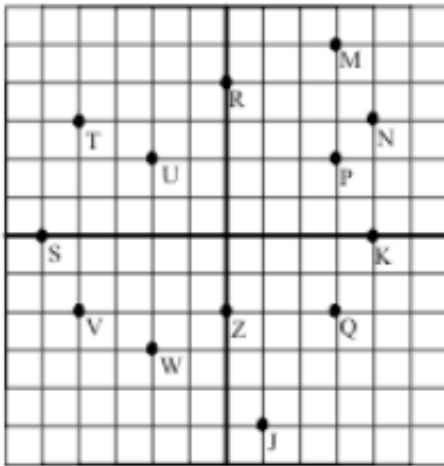
6) $9x = 12.5$

7) $\frac{2}{3}x = 18$

8) $\frac{5}{6}x = \frac{7}{13}$

Locating points in all quadrants of the coordinate plane

Name the coordinates of each point.



- | | |
|------|-------|
| 1) M | 6) T |
| 2) N | 7) U |
| 3) K | 8) V |
| 4) R | 9) W |
| 5) S | 10) Q |

6) Name all the points shown that lie on the x-axis.

7) Name all the points shown on the y-axis.

8) What is the x-coordinate of every point that lies on a vertical line through P?

9) Which of the following points lie on a horizontal line through W?

$(-2, 1)$ $(2, 3)$ $(1, -3)$ $(-2, 0)$ $(0, -3)$ $(2, 0)$