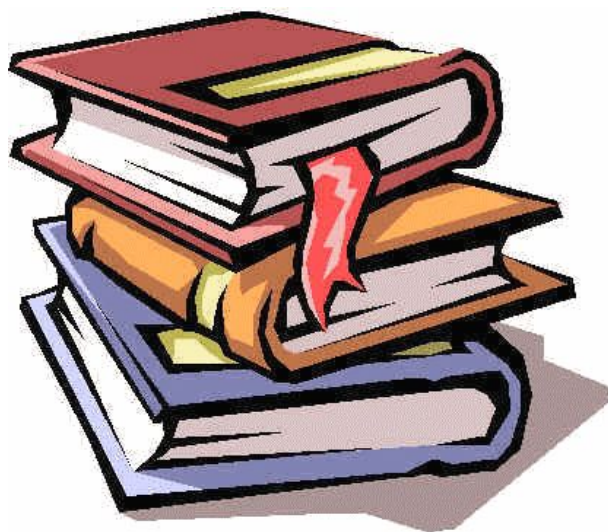




Collaborative Arts Middle School

Sixth grade

2018 Summer Mathematics Packet



Name: _____

Name: _____ Date: _____

Grade 6- Summer Mathematics Packet 2018

Directions: Multiple Choice -Choose the correct answer by circling the letter.

1. Evaluate $(2 + 3) \times (1.5 - 0.5)$
A 5
B 10
C 7
D 8
2. Express the calculation “add 8 and 7, then multiply by 2”
A $(2 \times 8) + 7$
B $2 + (8 \times 7)$
C $2 \times (8 + 7)$
D $7 + 2 \times 8$
- 3.

Based on the table above, which of the following comparisons of nail length is true?

- A $F > H$
- B $J < K$
- C $J > H$
- D $G < F$

4. Round 14.235 to the nearest tenth.

- A 14
- B 14.3
- C 14.23
- D 14.2

5. Multiply 123×34

- A 157
- B 3,214
- C 4,182
- D 3,400

6. Divide $9984 \div 64$

- A 257
- B 126
- C 164
- D 156

7.

- A 1
- B .05
- C 5
- D ,5

8. Which equation below gives the correct value of the following sum?

9.

- A $\frac{3}{4}$ gallon
- B 1 gallon
- C $1\frac{1}{2}$ gallon
- D 3 gallons

10. Kate made 180 ounces of punch for a party. She serves the punch in 8 ounce cups. How many cups can she serve?

- A 8 cups
- B 22 cups
- C $22\frac{1}{2}$ cups
- D 23 cups

11. Marla filled up her gas tank and then went on a trip. After she drove 329 miles, she filled her car with 14 gallons of gas. On average, how many miles per gallon did Marla drive?
- A 23 miles per gallon
 - B $23\frac{1}{2}$ miles per gallon
 - C 24 miles per gallon
 - D $24\frac{1}{2}$ miles per gallon
12. Isabel had 6 feet of wrapping paper. She used $\frac{3}{5}$ of the paper to wrap some presents. How much does she have left?
- A 18
 - B 15
 - C 12
 - D $18/5$
13. Carson needs to purchase 5.6 meters of tape for a project. If each roll of tape contains 80 cm and costs \$5, what is the total cost of the tape that Carson must buy?
- A \$7
 - B \$21
 - C \$35
 - D \$56
- 14.
- A $\frac{7}{80}$
 - B $\frac{7}{8}$
 - C $\frac{3}{10}$
 - D $1\frac{1}{8}$
- 15.
- A 10 cubic units
 - B 2 cubic units
 - C 5 cubic units
 - D 10 square units

16. What is the volume, in cubic inches, of the school locker below?

- A 2880 cubic inches
- B 2580 cubic inches
- C 390 cubic inches
- D 360 cubic inches

17. Four students sitting at a table were given $\frac{1}{3}$ of a pan of brownies to share. How much of a pan will each student get if they share the pan of brownies equally?

- A $\frac{3}{4}$
- B $\frac{1}{12}$
- C $\frac{1}{2}$
- D 12

18. What is the value of $4x + 9$, when $x = 4$?

- A. 13
- B. 17
- C. 25
- D. 52

19. Elizabeth has some stickers. She divides her stickers equally among herself and two friends. Each person gets 4 stickers. Which equation represents the total number, s , of stickers?

- A. $s + 3 = 4$
- B. $s - 3 = 4$
- C. $\frac{s}{3} = 4$
- D. $3s = 4$

20. Which equation represents 36 less than a number, y , is equal to 13?

A. $y - 36 = 13$

B. $36 - y = 13$

C. $13 - y = 36$

D. $36 + y = -13$

CONSTRUCTED RESPONSE: SHOW ALL WORK AND WRITE ANSWERS ON SPACE PROVIDED

21. Ms. Zankel needs at least 3 textbooks for every 5 students. She has 27 students. What is the smallest number of textbook she will need?

Show work:

Explain how you got your answer:

22. Russell bought 3 movie tickets for a total of \$21. Catherine bought 5 movie tickets for a total of \$35. Create a table to show the pattern of the prices of movie tickets. How much is 1 ticket, 2 tickets, and 4 tickets?

Show work:

Explain how you got your answer:

23.

$1 \text{ cup} = 8 \text{ ounces}$

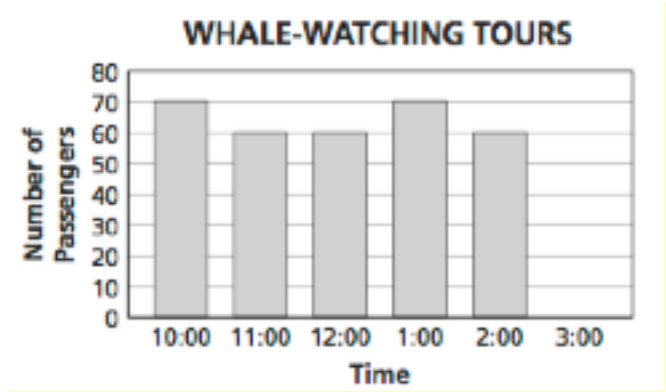
24.

25.

Show work:

Explain how you got your answer:

26. Sheri operates whale-watching boat tours. The graph below shows the number of passengers on five of the tours for one day.



Part A

Sheri’s goal is to have 380 passengers each day. How many passengers are needed on the 3:00 tour for Sheri to reach her goal?

Show your work

Answer _____ passengers

Part B

Use the data in the graph to explain whether Sheri is likely to meet her goal.

27. What is the value of x in the equation below?

$$66 + x = 226$$

Show your work

Answer _____

28. What fraction can be used to create a proportion with $\frac{4}{12}$?

Answer $\frac{4}{12} =$ _____

On the lines below, explain how you determined your answer.

29. What is the value of the expression $5x + 42$ when $x = 11$?

Answer _____

30. Ellie set a reading goal for the summer. She has completed 71% of her goal.
What decimal is equivalent to the percent of the goal that Ellie has completed?

Answer _____

What part of the goal does Ellie still need to complete? Write your answer as a fraction.

Answer _____

Self-Evaluation			
Rubric	Construct Viable Arguments	Model with Mathematics	Precision and Understanding
4	I made sense of arguments, identified errors and used clarifying questions to improve the arguments	I used an appropriate and complete strategy for solving the problem.	My answers are completely correct. I show complete understanding of the required mathematical knowledge.
3	I made sense of arguments and may have made minor mistakes while identifying errors and using clarifying questions	I used an appropriate but incomplete strategy for solving the problem.	My answers may have minor errors. I show nearly complete understanding of the required mathematical knowledge.
2	I may have made incomplete sense of arguments and major mistakes while identifying errors and using clarifying questions	I used an inappropriate strategy or my application of the strategy is unclear.	Some of my answers are correct. I show some understanding of the required mathematical knowledge.
1	I did not make sense of arguments and did not identify errors and use clarifying questions	I worked haphazardly with no particular strategy for solving the problem.	None of my answers are correct. I show limited or no understanding of the problem.
One thing I understood was “Glow” . _____		Next time, I could “Grow” _____	