



TIGERS

Name: \_\_\_\_\_



# SUMMER MATH PACKET

FOR ALL TIGERS ENTERING 7TH GRADE  
FOR THE 2019-20 SCHOOL YEAR

Please turn this in to your new math teacher on the first day of school for credit! If you are unsure of how to solve a problem, you may use any resource to help you. (For example, websites such as [www.khanacademy.org](http://www.khanacademy.org) may be helpful. DO NOT USE A CALCULATOR.

YOU MUST SHOW YOUR WORK.



1. Write a ratio for the following description: Karen made three times as many baskets as John during basketball practice.

2. Describe a situation that could be modeled with the ratio 4:1. (hint: Write a ratio relationship)

3. A father and his young toddler are walking along the sidewalk. For every 3 steps the father takes, the son takes 5 steps just to keep up. What is the ratio of the number of steps the father takes to the number of steps the son takes? Add equivalent ratios to build a ratio table.

| Number of steps the father takes | Number of steps the son takes |
|----------------------------------|-------------------------------|
| 3                                | 5                             |
|                                  |                               |
|                                  |                               |
|                                  |                               |
|                                  |                               |
|                                  |                               |

4. Mallory is on a budget and wants to determine which cereal is a better buy. A 10-ounce box of cereal costs \$2.79, and a 13 -ounce box of the same cereal costs \$3.99.

a. Which box of cereal should Mallory buy?

b. What is the difference between the two unit prices?

5. What is 30% of 450? (hint: set up a proportion, part to whole)

6. Melanie plays softball and is hitting 30% of the balls pitched to her. If she has hit the softball 39 times, about how many times has the ball been pitched to her?

7. Divide. (Use KFC method)

$3/8 / 6/10$

8. Divide. Show all work.  $4,732 \div 13$

9. Multiply. Show all work.  $37.52 \times .34$

10. Add. Show all work.  $98.7 + .574$

11. Subtract. Show all work  $879.3 - .345$

12. Order the following set of rational numbers from least to greatest, and explain how you determined the order.

$-3, 0, \frac{1}{2}, 1, -3\frac{1}{3}, 6, 5, -1, \frac{21}{5}, 4$

13. Identify which quadrant the ordered pairs belong in. (hint: I, II, III, IV)

(4,5) \_\_\_\_\_

(-6,-8) \_\_\_\_\_

(-4,6) \_\_\_\_\_

(7,-5) \_\_\_\_\_

14. Write an integer to represent each gain or loss.

| Description   | Integer Representation |
|---------------|------------------------|
| Loss of \$800 |                        |
| Gain of \$960 |                        |
| Gain of \$230 |                        |

15. Solve. (hint: use PEMDAS)

A.  $35 \div 3 \times 4$

B.  $4 + (6 \times 6) \div 8$

C.  $4^3 + 2 \times 8$

D.  $2 * (13 + 5 - 14 / (3 + 4))$

16. Circle all of the vocabulary words that could be used to describe the given expression.

a.  $6h - 10$

Addition

Subtraction

Multiplication

Division

b.  $5d / 6$

Sum

Difference

Product

Quotient

c.  $5(2 + d) - 8$

Add

Subtract

Multiply

Divide

17. Solve algebraically. Show all work.

a.  $b + 15 = 35$

b.  $2b = 20$

c.  $m + 20 = 100$

d.  $k - 16 = 40$

18. Using the data set below, determine the minimum, maximum range, median, mode, and mean. (hint: organize the data from the minimum number to the maximum number)

513, 525, 531, 533, 535, 542, 543, 549, 551, 552, 552

Minimum \_\_\_\_\_

Maximum \_\_\_\_\_

Range \_\_\_\_\_

Median \_\_\_\_\_

Mode \_\_\_\_\_

Mean \_\_\_\_\_

