



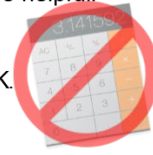
FOR ALL TIGERS ENTERING 8TH GRADE
FOR THE 2019-20 SCHOOL YEAR

TIGERS

Name: _____

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 may be helpful. DO NOT USE A CALCULATOR.

YOU MUST SHOW YOUR WORK.



NUMBERS AND OPERATIONS

Evaluate the following expressions:

1) $-9 + 4 =$

2) $5 - -8 =$

3) $-15 \div 5 =$

4) $45 \div -5 =$

5) $-36 \div -4 =$

6) $4 - 8 =$

7) $-3 \times -7 =$

8) $4 + -4 =$

9) $-8 + -8 =$

10) $8 - -6 =$

11) At 4:00 A.M. the temperature in Anchorage, Alaska is -15 degrees. Over the course of the next 24 hours the following temperature changes occur: $+10$, $+6$, -4 , $+7$, -8 , -14 . What is the final temperature? You may use a vertical number line to support your answer.

EXPRESSIONS AND EQUATIONS

Write equivalent expressions.

12) $5(x + 3) =$

13) $10(2x + 7) =$

14) $9x + 10 - 4x =$

15) $-2x + 14 - 23 + 3x =$

Solve the following equations.

$$16) 5x + 10 = 40$$

$$17) \frac{x}{3} + 8 = 12$$

$$18) -3x + 4 = 16$$

$$19) 5(2x + 10) = 100$$

$$20) \frac{2}{3}x + 5 = 11$$

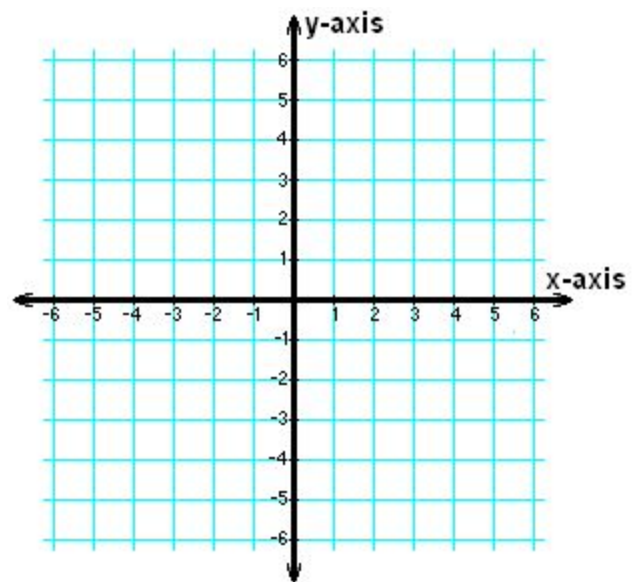
RATIOS AND PROPORTIONAL RELATIONSHIPS

21) You want to buy a package of rice. A 7 ounce package costs \$2.59. A 12 ounce package costs \$4.56. Determine the unit rate for each package and state which package is the best buy. Show all your work.

22)

a) Graph the points shown on the table

x	-2	-1	0	1	2
y	-6	-3	0	3	6



b) Is this proportional? How do you know?

c) What is the constant of proportionality?

Solve the following percent problems.

23) Fill in the following table:

Fraction	Decimal	Percent
$\frac{1}{4}$		
	0.5	
		40%

24) What is 35% of 125?

25) 25 is what percent of 125?

26) 15 is 5% of what number?

27) A comic book costs \$3.95 for a comic book company to print. If the company marks up the price by 20%, what is the new cost of the comic book?

28) A t-shirt originally cost \$18.50. It was on sale with a discount of 45% off. What is the new price of the shirt.

GEOMETRY

29) A circle has a radius of 5.

a) Find the circumference. $C=2\pi r$ $\pi = 3.14$

b) Find the area. $A=\pi r^2$ $\pi = 3.1$

30) Find the measure of the missing angles.

