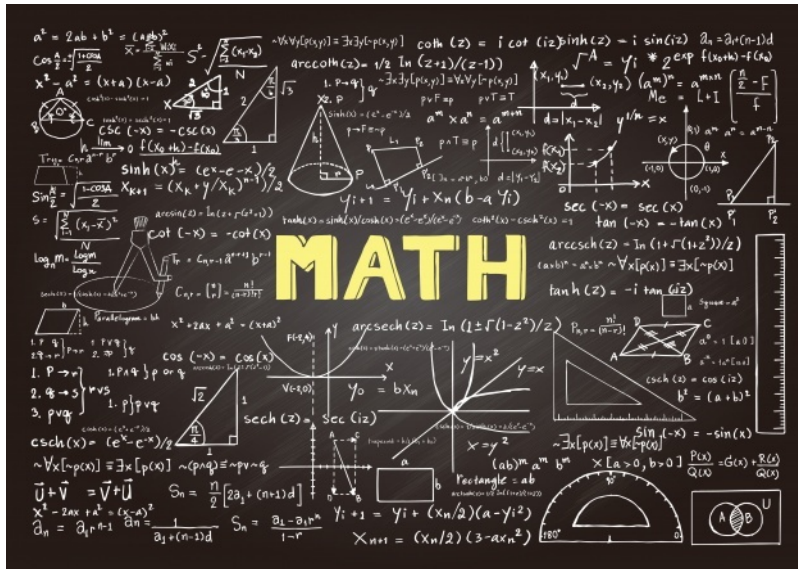
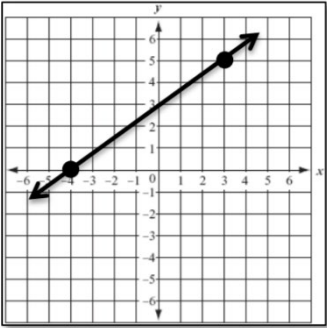


MATH PACKET

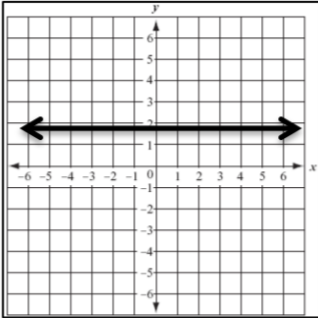


1.) Calculate the slope of the line.

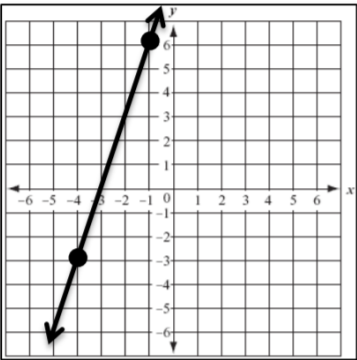
a.)



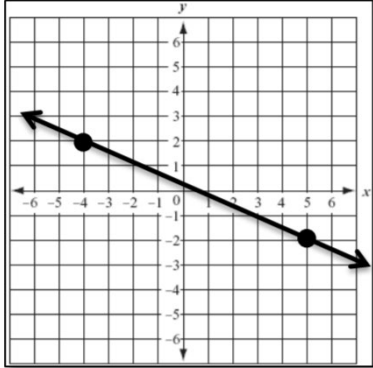
b.)



c.)



d.)



2.) Calculate the slope of the line that passes between the two points.

a.) $(1, -8)$ and $(-3, 0)$

b.) $(3, -7)$ and $(7, 2)$

c.) $(-6, 3)$ and $(12, -3)$

d.) $(5, -11)$ and $(15, 9)$

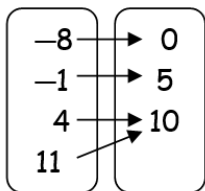
e.) $(10, 2)$ and $(4, -8)$

3.) Which of the following is an irrational number?

- a) 2.8
- b) $\sqrt{19}$
- c) $\frac{3}{5}$
- d) $\sqrt{81}$

4.) A discounted ticket for a football game costs \$12.50 less than the original price p . You pay \$63 for a discounted ticket. Write and solve an equation to find the original price.

5.) Determine whether the relation is a function.



6.) Monyne created a map of her neighborhood. She colored in the distance from her school to her house and wrote on the map that the distance was $0.\bar{7}$ of a mile. Write the distance between Monyne's house and her school as a fraction.

7.) You scored 83, 96, and 88 on three of your math tests. Write and solve an equation to find the score you need on the fourth test so that your mean test score is 90.

8.) The coordinates of A, B, C are given below .What are the coordinates of A', B' and C' after a reflection across the x-axis?

A(-4, -1)

B (-2, 0)

C (1 , -2)

9.) The coordinates of S, T, U are given below .What are the coordinates of S', T' and U' after a translation right 1 unit and up 2 units?

S(4, 5)

T(5, 2)

U (0, -1)

10.) Which of the following is a rational number?

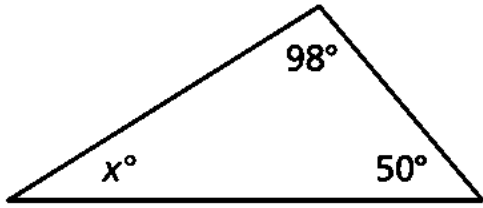
a) $\sqrt{20}$

b) π

c) $\sqrt{21}$

d) $\sqrt{25}$

11.) Find the value of x.

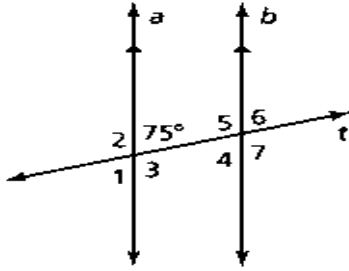


12.) Solve the equation. Check your solution.

$$-4x - 8x + 17 = 23$$

13.) Graph the function $y = -2x + 1$ using inputs of -1 , 0 , 1 , and 2 .

14.) Use the figure to find the measures of the numbered angles.



15.) The ages in years, of the people online at the skating rink are 24, 16, 15, 19, 33, 30, 56, and 19. Find the mean, median, mode and range of the data set.

16.) Estimate the square root to the nearest tenth.

$$\sqrt{1.19}$$

17.) The cost d (in dollars) of making w watches is represented by $d = 25w + 35$. How many watches are made when the cost is \$260?

18.) The distance y in miles traveled by a car is 20 times the number of gallons x of gasoline used by the car. Write and graph a function that describes the relationship between x and y .

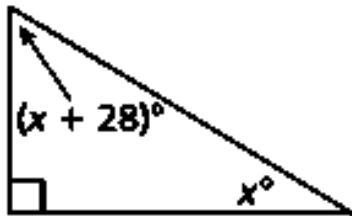
19.) Hugo and Sandy leave a campsite and walk in different directions. After several hours, Hugo has walked 5.6 miles east while Sandy walked 3.3 miles north. How far apart are Hugo and Sandy?

20.) Nickolas runs 2^5 miles one week and 2^7 miles the next week. How many times farther did he run in the second week than in the first week?

21.) Find the value of x for the given value of y .

$$y = 4x - 6; y = -20$$

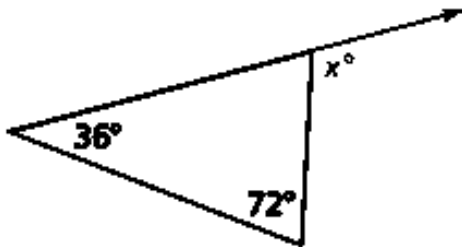
22.) Find the value of x .



23.) The points in the table lie on a line. Write an equation for the line.

x	-2	4	10
y	1	-6	-13

24.) Find the measure of the exterior angle.



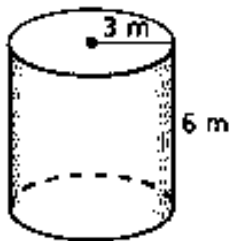
25.) Evaluate the expression.

$$2\sqrt{81} - 1$$

26.) Use the table to write a linear function that relates y to x .

x	-4	-3	-2	-1	0
y	13	11	9	7	5

27.) Find the volume of the cylinder. Round your answer to the nearest tenth.



28.) Solve the system by substitution.

$$5x - 2y = 10$$

$$y = 3x - 4$$

29.) Solve the system by elimination.

$$-3x + 4y = 16$$

$$3x - y = 14$$

30.) Find the volume of a cone with a diameter of 6 feet and a height of 3 feet. Round your answer to the nearest tenth.

31.) What value of w makes the equation below true?

$$2(3r + 11) = 7r - 3r$$