

## 8<sup>th</sup> Grade EOG Packet Quiz

Name \_\_\_\_\_

1. The area of a chalkboard is 220 square inches. *About* how long is each side of the chalkboard?

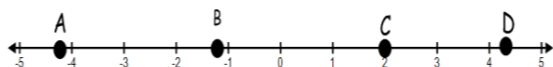
2. Place the following numbers from least to greatest.

$$3.6, \sqrt{15}, \sqrt{10}$$

3. List **all** classifications of the real number systems of the number below:

$$-\frac{24\pi}{8\pi}$$

4. Which point represents  $-\sqrt{18}$ ?



5. Simplify.

$$5y \cdot (4y^3)^3$$

6. There are 140,000,000 miles between Earth and Mars. Write this number in scientific notation.

7. Simplify

$$\frac{4^2}{5^3}$$

8. The population of the world is about  $7 \times 10^9$  people. Write this value in standard form.

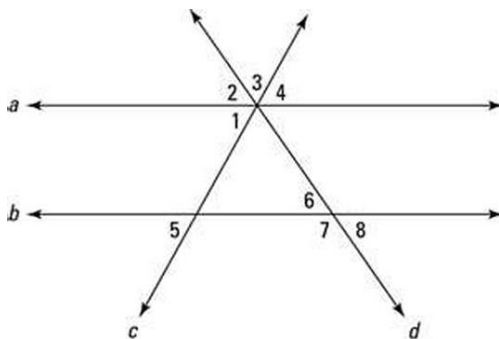
9. What value(s) of  $x$  will make this equation true?

$$x^2 = 121$$

10. John wants to visit the community pool for the summer. He can buy a membership at the beginning of the summer for \$40 and pay only \$2 each visit. John's other option is to pay \$6 each visit to the pool. How many visits must John make to the pool this summer for the two plans to be equal cost?

11. Lines  $a$  and  $b$  are parallel lines, cut by transversals  $c$  and  $d$ .

What is the relationship between angles 4 and 5? (What type of angles are they?)



12. A triangle has the side measurements of 15ft, 20ft, and 35 ft. Is this triangle a right triangle?

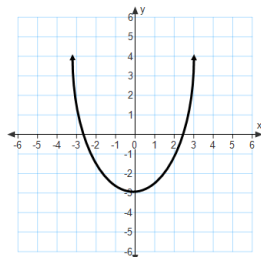
13. A chicken noodle soup can has a diameter of 10cm and a height of 25cm. About how much chicken noodle soup is in four cans of soup?

*Hint:  $V = \pi r^2 h$  (use 3.14 for  $\pi$ )*

14. What is the rate of change in the table below?

X	Y
-3	5
0	4
6	2
15	-1

15. Identify the following relation as a Function or Not a Function:

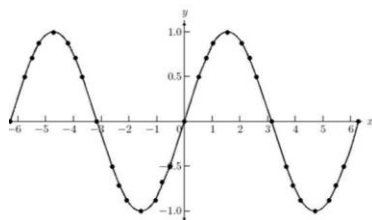


16. Identify the following relation as a Function or Not a Function:

$(-3, 2)$   $(4, 2)$   $(6, 2)$   $(-1, 2)$   $(5, 2)$

17. Describe the slope of function  $h(x)$  from  $x = 2$  to  $x = 4$ .

(Increasing, Decreasing, Zero, or Undefined)



18. Write the equation of the line that passes through the point  $(-4, 3)$  and has a slope of  $-2$ .

$$Y=?$$

19. Write the equation of the line that passes through the points  $(8, -2)$  and  $(-3, -2)$ .

$$Y=?$$

20. Describe the correlation between years of experience and income at a local company. (Positive, Negative, or None)

