

Math 8  
Chapters 1/2 Review Worksheet

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

1.  $26 - 12 \div 2 + 8$

2.  $\frac{9}{5} - \frac{7}{5} + \frac{3}{5}$

3.  $(2 + 4)^3 \cdot 2 - 2$

4.  $y^3 + 4x$  when  $x = 4$  and  $y = 5$

5.  $\frac{4xy}{x+2}$  when  $x = 10$  and  $y = 1.5$

6.  $32 - (x + 7) \div y$  when  $x = 9$  and  $y = 2$

**Write each phrase as a variable expression.**

7.) the quotient of a number and 14

8.) a number decreased by 25

9.) the product of a number and 4

10.) the sum of a number and 7

11. You are buying your favorite candy and soda for afternoon snacks. You buy 5 candies and 9 sodas. The cost of one candy is  $x$  dollars and the cost of one soda is  $y$  dollars.

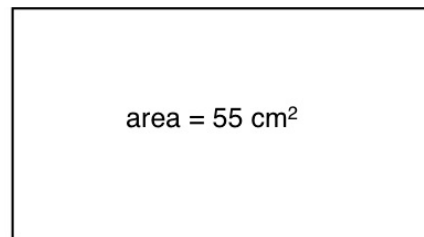
Expression:

Find the total cost if one candy is \$0.75 and one soda is \$0.25.

12. Find the length of the rectangle.

Length = \_\_\_\_\_

5 cm



$x$

13.) You are putting a rectangular pen around the animals in your backyard. It will have a length of 14 ft and a width of 12 ft.

How much fence will you need?  
around?

How much area will the animals have to run

14.) An elite runner can run 12 miles per hour. If they run at this pace for 2.5 hours, how far will they run?

Compare using  $<$ ,  $>$  or  $=$ . Justify your answer.

15.  $|-12|$  \_\_\_\_\_  $|-14|$

16.  $-17$  \_\_\_\_\_  $-30$

Evaluate each expression when  $a = -7$ ,  $b = 21$  and  $c = -2$ .

17)  $\frac{bc}{-a}$

18)  $a - b - c$

19)  $3a - 2b$

20)  $-4ac$

21. The temperature outside is  $-11^{\circ}\text{F}$ . The temperature increases  $117^{\circ}$ . Write an expression to represent the situation. What is the new temperature?

\*\*\*If you are unsure how to do any of these problems, please let me know. All of this material will be on the cumulative test. YOU CAN DO IT!!!!