

Name: _____

Date: ____/____/____

Period: _____

Score: ____/____

Percent: _____

Grade: _____

Math 8 Chapter 2 SG

Solve for x.

1.) $\frac{x}{8} = \frac{7}{40}$

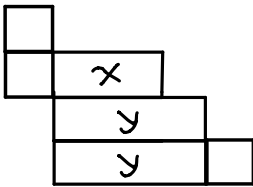
2.) $\frac{2}{6} = \frac{x}{30}$

3.) $\frac{4}{x} = \frac{18}{25}$

4.) $\frac{75}{12.5} = \frac{24}{x}$

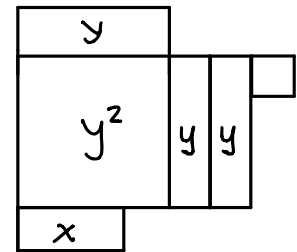
Find the area and perimeter of the construction. Provide the algebraic solution in simplest form!

5.)



Area: _____
Perimeter: _____

6.)



Area: _____
Perimeter: _____

Evaluate the following expressions. Show your work!

7.) $4x-8$; when $x=-9$ value: _____ 8.) $-2x-9$; when $x=2$ value: _____ 9.) $9-2x$; when $x=-3$ value: _____

Simplify each expression.

10.) $9x^2 + 6x - 8 - 4x^2 + 1 =$ _____

11.) $5x + 3 - 7x^2 + 6 - 3x =$ _____

Use order of operations to find the value of each expression. Show all steps.

12.) $8^2 - 6 \div 3 + 2(5-1)^2 \div 4 + 2^2$ 13.) $4(6-3)^2 - 2 \cdot 8 + 15 \div 3 + 3^2 \div 4.5$

Compare the expression mats. Which is greater? (Use $>$, $<$, $=$) Show all of your legal moves as you simplify.

14.)

15.)

Is the table proportional? If "yes," then write the equation that models it, if "no" then explain why not.

16.)

x	5	6	7	8
y	15	18	21	25

yes or no

17.)

x	5	6	7	8
y	2.5	3	3.5	4

yes or no

Simplify.

18.) $450 - (-34) =$ _____ 19.) $-310 - 180 =$ _____ 20.) $-549 + 228 =$ _____

Solve each equation using any method. Show your steps clearly. Check your solution if you have time. Box your answer.

21.)

22.) $5x + 2 = -43$

23.) $2x + 2 - (x + 1) = 3x - 19$

Complete the portion web for the following values.

