Expressions

1. Evaluate these expressions if $a = 4$, $b = 2$, and $c = 5$.

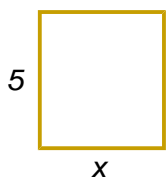**a.** $10(c + b)$ **b.** $\dfrac{a + 3c}{b}$ **c.** $a^2 - 2b$ **d.** $5a^2 + 2bc$
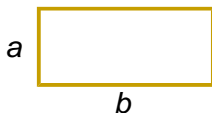
Variable	Value of expression

2. Find the value of the expression $\dfrac{8y}{3}$ when the variable gets the values y = 2, 4, 6, 8, and 10. Record your results in a table that lists both the values of the variable and of the expression.

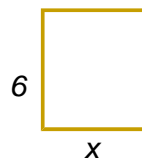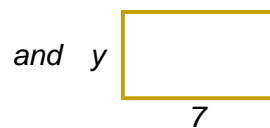3. Write an expression for the <u>areas</u> of these rectangles and squares.

a.   **b.**   **c.**

4. Write an expression for the perimeters of these geometrical shapes, and solve the problems.
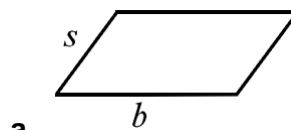
a. $p =$
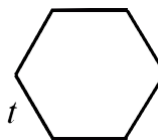
b. $p =$

c. $p =$

d. In figure a), if $p = 21$ and $s = 3.5$, what is b?

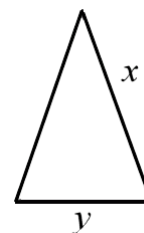**e.** In figure c), if $x = 15.5$ cm and $y = 11.2$ cm, what is the perimeter?

f. In figure b), if the perimeter is 5 ft, what is t?

a.   **b.**   **c.**

5. **a.** If x + 5 = 15, what is x?

   b. If 2y − 1 has the value 11, what is y?

6. Fill in the table with the missing values of the variable and the missing values of the expression.

y	2y + 4
1	
10	
	34
	46
	50
50	