

# Expressions

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

a.  $10(c + b)$

b.  $\frac{a + 3c}{b}$

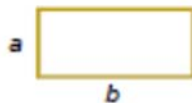
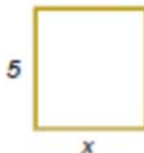
c.  $a^2 - 2b$

d.  $5a^2 + 2bc$

Variable	Value of expression

2. Find the value of the expression  $\frac{8y}{3}$  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 areas of these rectangles and squares.



a.

b.

c.

4. Write an expression for the perimeters of these geometrical shapes, and solve the problems.

a.  $p =$

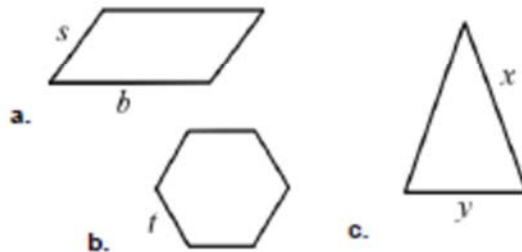
b.  $p =$

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  $t$ ?



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	

