Expressions Mini-Quiz Review Sheet   KEY

Write the expression to represent the word phrases:

A)   The product of 9 and x $9x$

B)   The difference of 7 and x $7-x$

C)   8 less than the quotient of x and 4 $x/4 - 8$

D)   Double the sum of 8 and x $2(8+x)$

The length of a rectangle is 27 units. The width of the rectangle is w units. Write the expression representing the area and perimeter of the rectangle.

A)   Area: $27w$ square units

B)   Perimeter: $2w + 54$ units

$$27 + w + 27 + w$$

Evaluate the following expressions for x = -4 and y = 5.

A) $2 - x + 8y$ $2 - (-4) + 8(5) = 2 + 4 + 40 = \boxed{46}$

B) $4(x - y) + x$ $4(-4) - 5) + (-4) = 4(-9) - 4 = -36 - 4 = \boxed{-40}$

C) $3y^2 - x + (8 + x)^2$ $3(5)^2 - (-4) + (8 + (-4))^2 = 3(25) + 4 + (4)^2$

$$75 + 4 + 16$$
$$\boxed{95}$$

Simplify the expressions.

A) $2x + 4x - 8 - 10x + 2$ $-4x - 6$

B) $3x^2 + 7x - 5x^2 + (-6)$ $-2x^2 + 7x - 6$

C) $9(3x - 4) + 4x$

$27x - 36 + 4x$ $31x - 36$

Find the value of x for the following equations.

A) $12(x - 3) = -48 - 36$ $x = -4$

B) $-5(4n - 2) = -20n + x$ $x = 10$