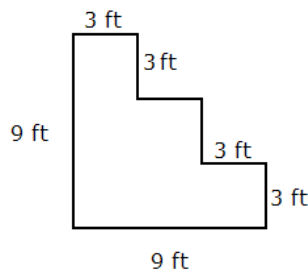


- List all factors of 72.
- Consider the following numbers: 1296, 17060, 38041, 4707. Select all the numbers from the list that are divisible
  - by 2
  - by 3
  - by 6
- Find the area and perimeter for the figure shown on the picture below.



- Simplify each of the following.

a) $10 - 3(-2) - 2(5 - 3(-4))$	d) $ 3 - 8 -  5 + 4  $
b) $-5^2 - (-2)^2 - (-2)^3$	e) $ 3 - 8 -5 + 4  $
c) $\frac{-3^2 - (-3)^2 - 20 \div (-5) \cdot 2}{(-1)^2 + (-2)^2}$	f) $ 3 -  8 - 5 + 4  $

- Evaluate each of the following expressions if  $x = -3$  and  $y = 5$ .

a) $\sqrt{-x^2 - x + 3y}$	b) $2(3x - y) - 3(2x + y)$	c) $-x^2y - x$
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- Simplify the algebraic expressions as indicated.

a) $(2x^2 - 4x + 7) - (-x^2 - 4x - 7)$	d) $2x - 5(3x + 1)$
b) $3(2x - y - 5) - 5(-x - 2y + 1)$	e) $(2x - 5)(3x + 1)$
c) $(3x - y)(-x + 2y)$	f) $3(x - 2)^2 - (3x - 2)(x + 5)$

- Simplify each of the following.

a) $(\sqrt{5} - 2)(3\sqrt{5} + 7)$	c) $(\sqrt{3} - 2)^3$	e) $\sqrt{72} - 2\sqrt{18} + 3\sqrt{20}$
b) $(2\sqrt{3} - 5)^2$	d) $(2\sqrt{7} - 1)(2\sqrt{7} + 1)$	f) $3(2\sqrt{5} - 1)^2 - \sqrt{5}(3 - \sqrt{5})$

- Simplify the expression  $x^2 - 4x - 3$  if

a) $x = \sqrt{2}$	b) $x = 2 - \sqrt{7}$	c) $x = 2 + \sqrt{5}$
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- Solve each of the following equations. Make sure to check your solutions.

a) $5m + 2 = -2(m + 6)$	d) $2(x - 3) - 3(x - 5) = 9 - 3x$
b) $2(-2y + 3) - 3(y - 5) = 4 + 5(y + 1)$	e) $(x - 1)(x + 5) - (x - 5)^2 = 7(2x - 3)$
c) $(x - 3)(2x - 1) - 7 = 2(4 - x)^2$	