Keystone Review – Systems of Equations

Name: _____   Date: _____

1. Solve the following system of equations algebraically and check:

$$x - 4y = 16$$
$$y = 1 - x$$

2. Solve the following system of equations for x:

$$3x + y = 9$$
$$2x - y = 6$$

3. Solve the following system of equations for x:

$$3x + 3y = 21$$
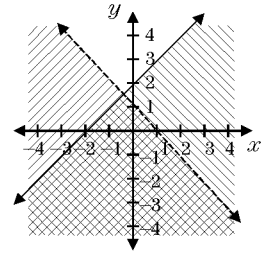$$6x - 3y = 6$$

4. Which ordered pair is in the solution set of the system of inequalities shown in the graph?

   A. $(0, 0)$

   B. $(1, 5)$

   C. $(-3, 3)$

   D. $(3, 3)$
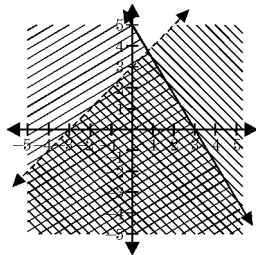
5. Which ordered pair is in the solution set of the system of inequalities shown in the accompanying graph?
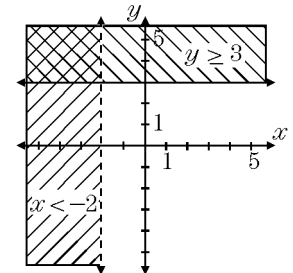
   A. $(2, 5)$

   B. $(2, -2)$

   C. $(4, 3)$

   D. $(-4, 3)$

6. The accompanying diagram represents the graphs of the inequalities $y \geq 3$ and $x < -2$.

   Which ordered pair names a point in the solution set of this system of inequalities?

   A. $(3, 5)$

   B. $(3, -5)$

   C. $(-3, 5)$

   D. $(-3, -5)$

7. Which is a solution for the following system of equations?

$$y = x^2$$
$$y = -4x + 12$$

   A. $(-2, 4)$ B. $(6, 36)$

   C. $(2, 4)$ D. $(-6, 24)$

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1.
Answer: $x = 4,\ y = -3$

2.
Answer: 3

3.
Answer: 3

4.
Answer: A

5.
Answer: B

6.
Answer: C

7.
Answer: C