

**Algebra 2**  
**Quiz 3.5-3.6**

NAME \_\_\_\_\_

**Write the letter for the best answer.**

**Solve the system by Graphing.**

1.  $y = x^2 - 2x + 4$   
 $y = 4x - 1$

- A. (2, 4)
- B. (0, 4)
- C. (1, 3)
- D. (2, 2)

2.  $y = 2x^2 - 8x + 5$   
 $y = 2x - 3$

- A. (1, 0) and (4, 6)
- B. (1, -1) and (4, 5)
- C. (0, -1) and (3, 5)
- D.  $\emptyset$

**Solve the system using Substitution.**

3.  $y = -2x^2 + 4x - 1$   
 $y = 2x - 5$

- A. (2, -1) and (-1, -7)
- B. (2, -3) and (-1, -5)
- C. (3, -1) and (-2, -7)
- D.  $\emptyset$

4.  $y = x^2 - 4x + 6$   
 $4x - 2 = x^2 + y$

- A. (1, 2)
- B. (2, 2)
- C. (1, 1)
- D.  $\emptyset$

**Solve the system by Elimination.**

5.  $6x^2 + 4x - y = 4$   
 $3x^2 - x - y = 2$

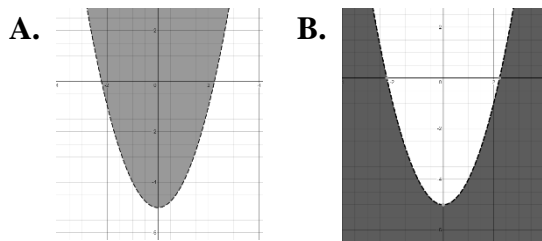
- A. (-2, 13) and  $(\frac{1}{3}, -2)$
- B. (2, 29) and  $(-\frac{4}{3}, -\frac{11}{3})$
- C. (2, 30) and  $(-\frac{1}{4}, -\frac{19}{4})$
- D.  $\emptyset$

6.  $y = 2x^2 - x + 1$   
 $y = 4x + 4$

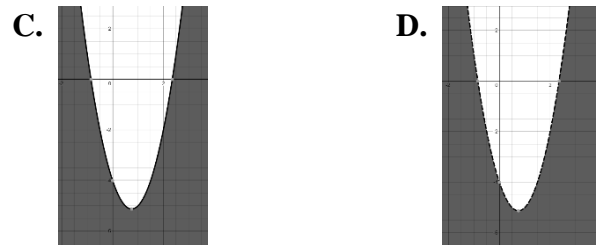
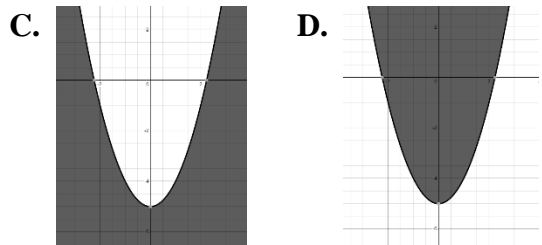
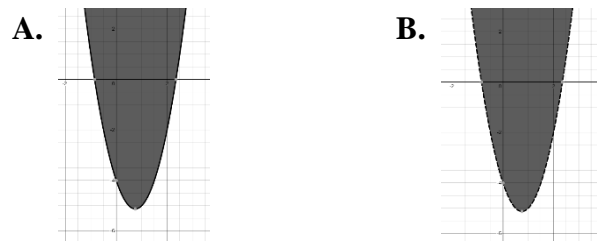
- A. (2, 10) and  $(-\frac{5}{2}, 3)$
- B. (-2, 11) and (-1, 3)
- C. (3, 16) and  $(-\frac{1}{2}, 2)$
- D.  $\emptyset$

**Graph the inequality.**

7.  $y \geq x^2 - 5$



8.  $y < 2x^2 - 3x - 4$



**Simplify the inequality algebraically.**

9.  $x^2 - 3x - 18 \geq 0$

- A.  $x \leq -3$  or  $x \geq 6$
- B.  $x \leq 6$  or  $x \geq -3$
- C.  $-3 \leq x \leq 6$
- D.  $6 \leq x \leq -3$

10.  $3x^2 - 13x + 4 < 0$

- A.  $4 < x < \frac{1}{3}$
- B.  $\frac{1}{3} < x < 4$
- C.  $x < \frac{1}{3}$  or  $x > 4$
- D.  $x > \frac{1}{3}$  or  $x < 4$