

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

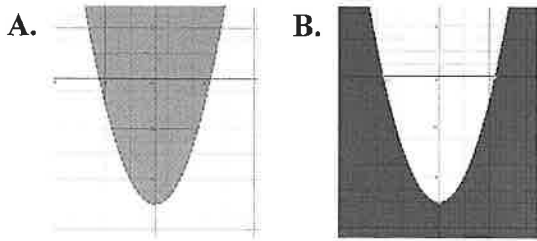
- A. (-2, 13) and $(\frac{1}{3}, -2)$
- B. (2, 29) and $(-\frac{4}{3}, -\frac{11}{3})$
- C. (2, 30) and $(-\frac{1}{4}, -\frac{19}{4})$
- D. \emptyset

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

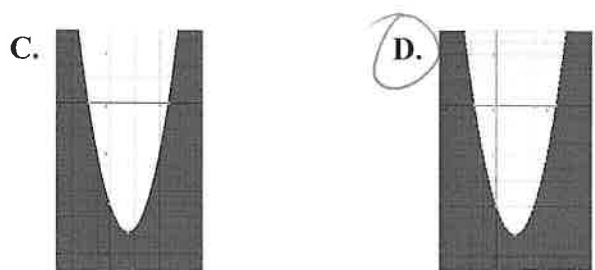
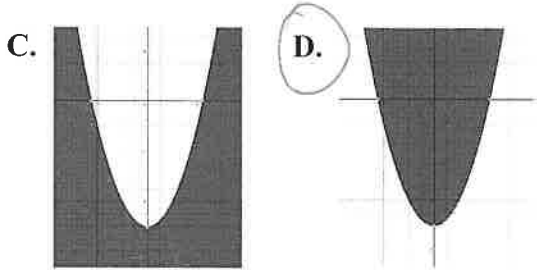
- A. (2, 10) and $(-\frac{5}{2}, 3)$
- B. (-2, 11) and (-1, 3)
- C. (3, 16) and $(-\frac{1}{2}, 2)$
- D. \emptyset

Graph the inequality.

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



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



Simplify the inequality algebraically.

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

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

A. $x \leq -3$ or $x \geq 6$

A. $4 < x < \frac{1}{3}$

B. $x \leq 6$ or $x \geq -3$

B. $\frac{1}{3} < x < 4$

C. $-3 \leq x \leq 6$

C. $x < \frac{1}{3}$ or $x > 4$

D. $6 \leq x \leq -3$

D. $x > \frac{1}{3}$ or $x < 4$