

8.1 Solving Systems of Equations by Graphing

1. Solve each system by graphing.

a. $y = x + 7$

$y = (x + 7)^2 + 3$

b. $f(x) = -x + 5$

$g(x) = \frac{1}{2}(x - 4)^2 + 1$

c. $y = 2(x + 1)^2 + 4$

$y = (x + 1)^2$

d. $y = -(x - 2)^2 + 4$

$y = 2(x - 2)^2 + 4$

2. Write each equation in the form $f(x) = a(x - p)^2 + q$.

a. $y = x^2 + 4x + 7$

b. $f(x) = 3x^2 - 24x + 40$

c. $f(x) = -5x^2 - 20x - 30$

3. Solve each system by graphing.

a. $y = x^2 - 6x + 8$

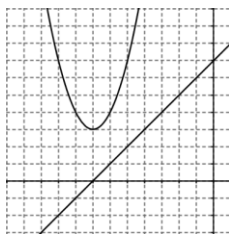
$y = x - 2$

b. $f(x) = x^2 - 2x + 3$

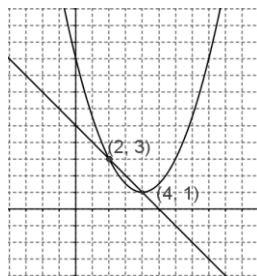
$g(x) = -2x^2 + 4x + 3$

Answers

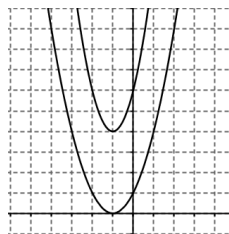
1a. No Solution



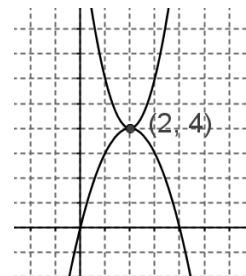
b.



c. No Solution



d.

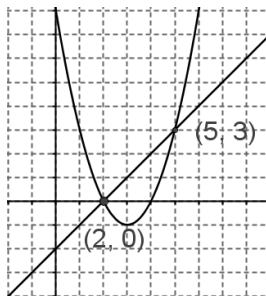


2a. $y = (x + 2)^2 + 3$

b. $f(x) = 3(x - 4)^2 - 8$

c. $f(x) = -5(x + 2)^2 - 10$

3a.



b.

