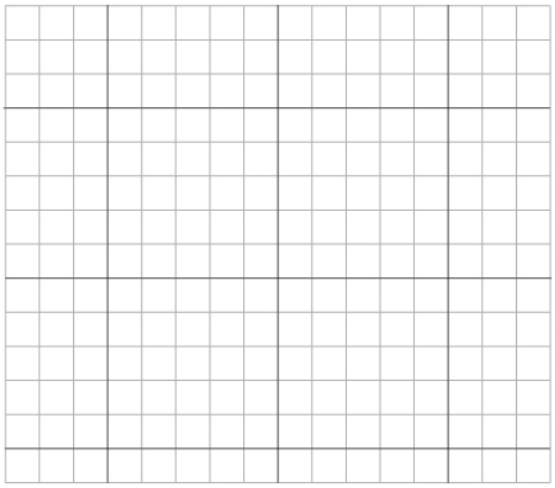
Graphing Quadratic Linear Systems

MATH MONKS

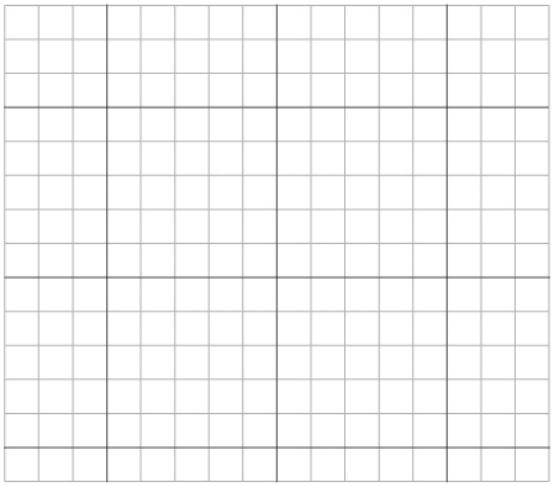
1. Solve each linear and quadratic system by graphing.

a) $y = -x^2 + 5x + 6;\ y = x + 6$



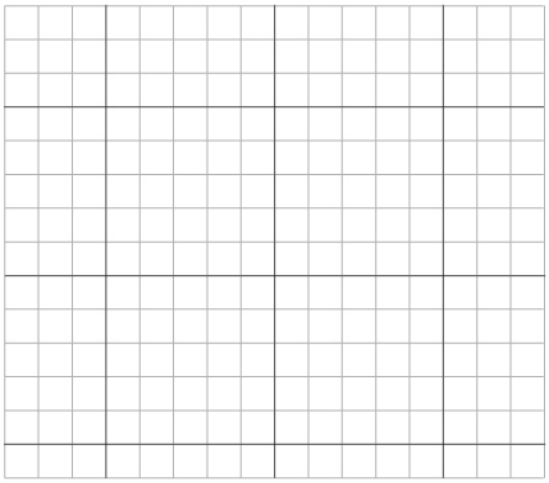
Solution: .....

b) $y = x^2 + x - 2;\ y = -x + 1$



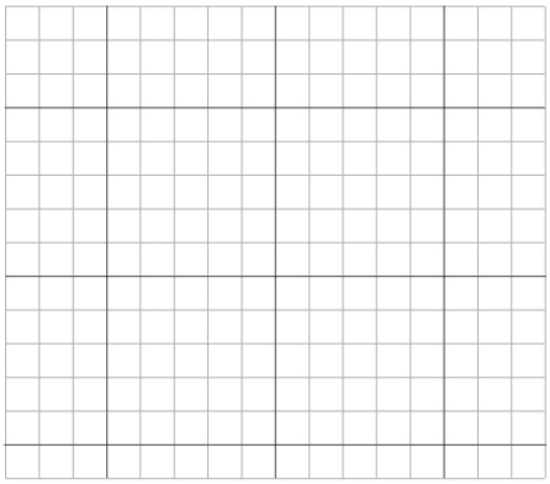
Solution: .....

c) $y = 2x^2 + 3;\ y = x + 2$



Solution: .....

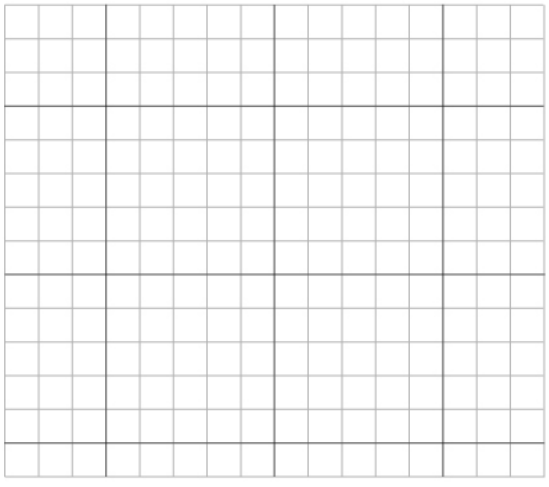
d) $y = -(x + 2)^2 + 5;\ y = 5$



Solution: .....

2. State the number of solutions to the given sets of linear and quadratic equations by graphing.

a) $y = -x^2 + 2x + 7;\ y = -2x + 2$



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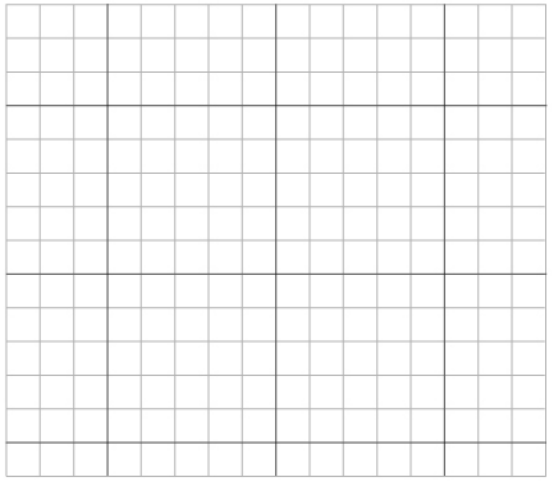
b) $y = (x + 2)^2 - 6;\ y = 4x - 2$



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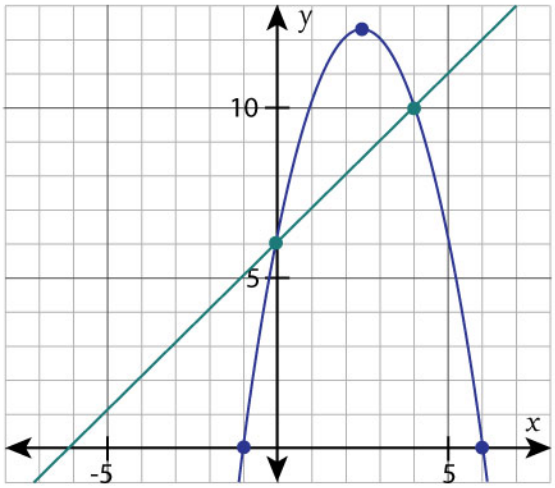
Graphing Quadratic Linear Systems

Answers

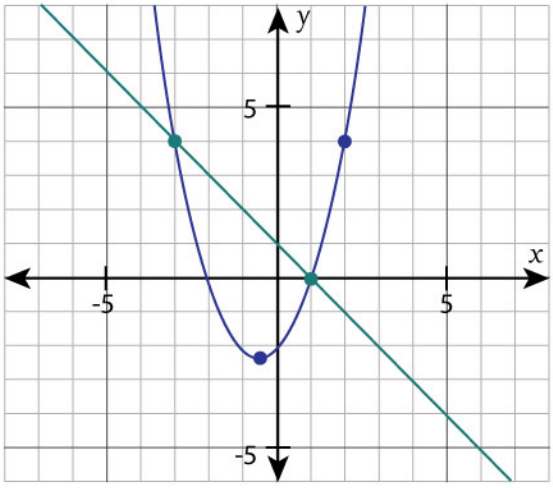
1. Solve each linear and quadratic system by graphing.

a) $y = -x^2 + 5x + 6;\ y = x + 6$



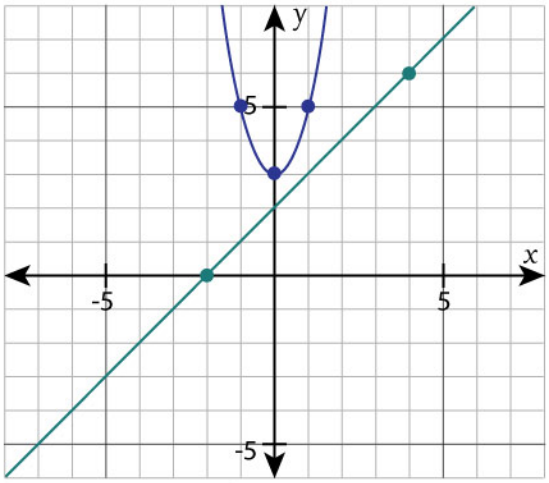
Solution: (0, 6) and (4, 10)

b) $y = x^2 + x - 2;\ y = -x + 1$



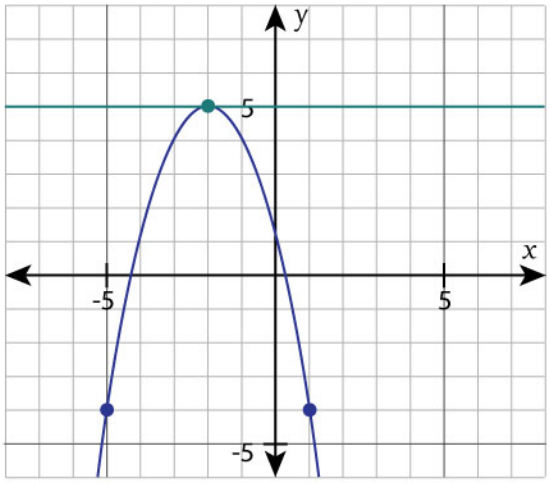
Solution: (-3, 4) and (1, 0)

c) $y = 2x^2 + 3;\ y = x + 2$



Solution: No Solution

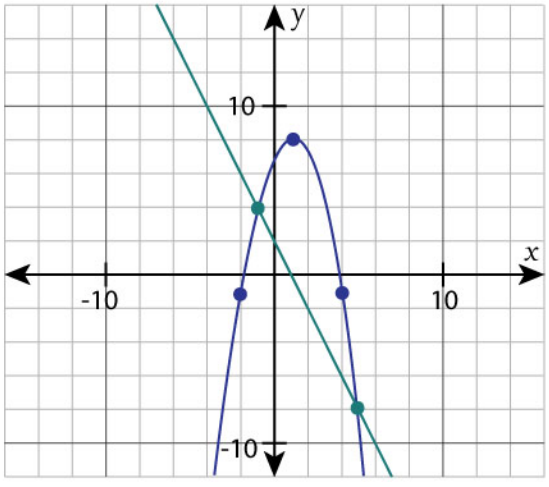
d) $y = -(x + 2)^2 + 5;\ y = 5$



Solution: (-2, 5)

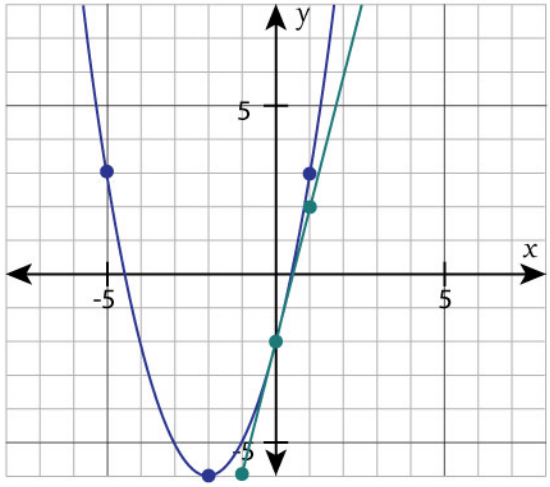
2. State the number of solutions to the given sets of linear and quadratic equations by graphing.

a) $y = -x^2 + 2x + 7;\ y = -2x + 2$



Two Solutions

b) $y = (x + 2)^2 - 6;\ y = 4x - 2$



One Solution