Algebra 1

Name_____

Factoring and Quadratic Graphing

Date_____ Period____

Solve each equation by factoring.

1) $n^2 - 28 = 3n$

2) $n^2 + 11n = -28$
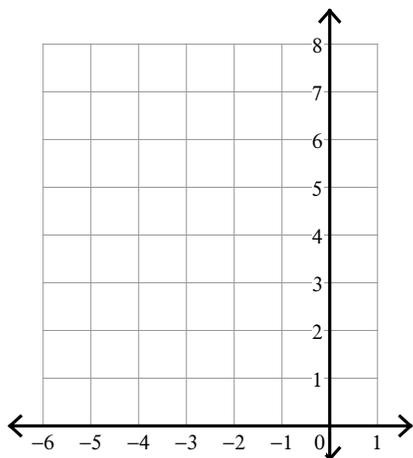
3) $5r^2 + 24r - 5 = 0$
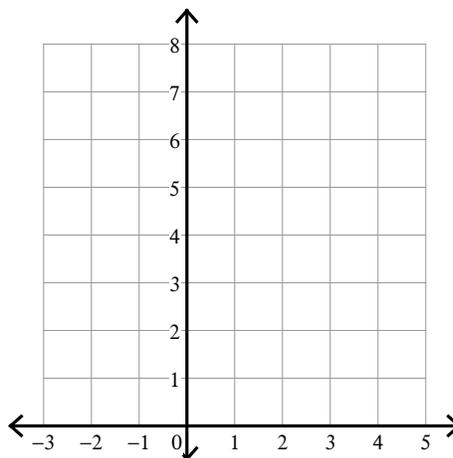
4) $7r^2 - 26r - 8 = 0$

5) $5k^2 = 7k + 24$

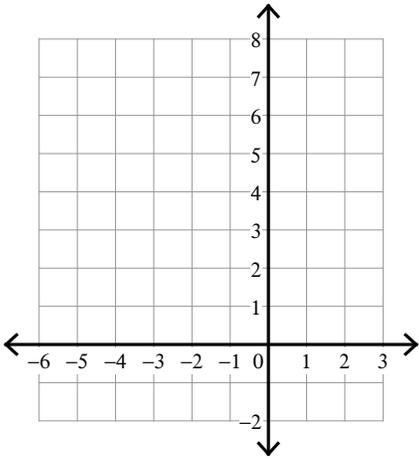6) $5n^2 - 37n = -14$

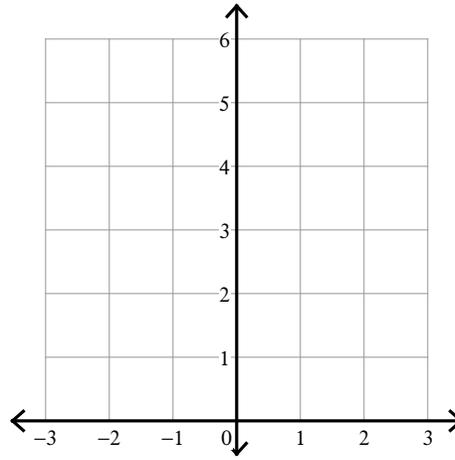**Sketch the graph of each function.**

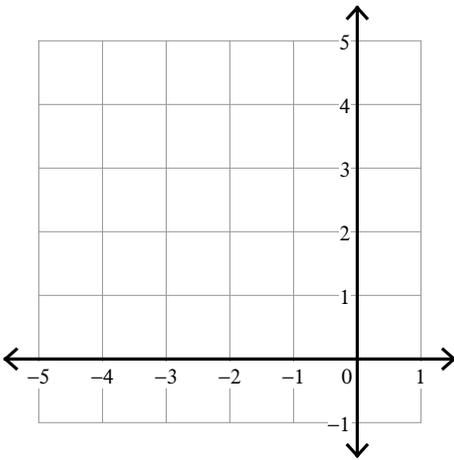7) $y = x^2 + 8x + 19$

8) $y = x^2 - 2x + 4$
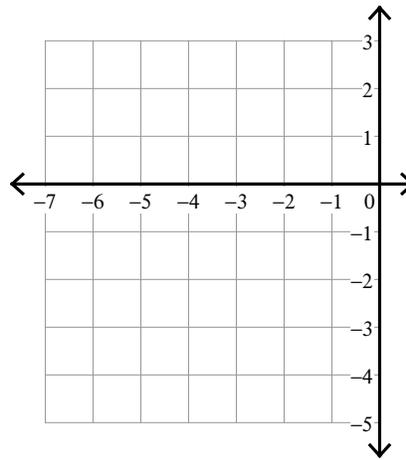
9) $y = 2x^2 + 16x + 31$
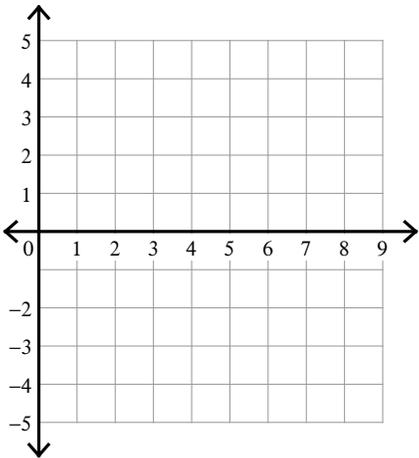
10) $y = x^2 + 2x + 2$

11) $y = -x^2 - 2x + 3$

12) $y = -x^2 - 8x - 15$

13) $y = -2x^2 + 16x - 28$

14) $y = 2x^2 + 8x + 9$