

Quadratic Practice

Factor each completely.

1) $a^2 - 3a - 28$

2) $x^2 - 3x + 2$

3) $9x^2 + 11x + 2$

4) $9x^2 - 18x - 16$

5) $16n^2 - 36$

6) $9b^2 - 25$

7) $m^2 + 14m + 49$

8) $9a^2 - 24a + 16$

Solve each equation by factoring.

9) $k^2 - 16 = -6k$

10) $n^2 = 10n - 16$

Solve each equation by completing the square.

11) $x^2 + 6x - 21 = -5$

12) $n^2 - 4n - 4 = 6$

Solve each equation by taking square roots.

13) $3b^2 - 2 = 298$

14) $8(n - 5)^2 + 3 = 35$

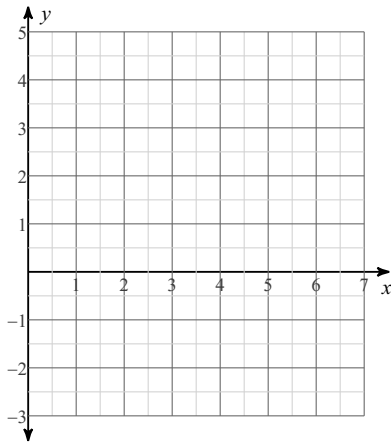
Solve each equation with the quadratic formula.

15) $4x^2 - 7x = 92$

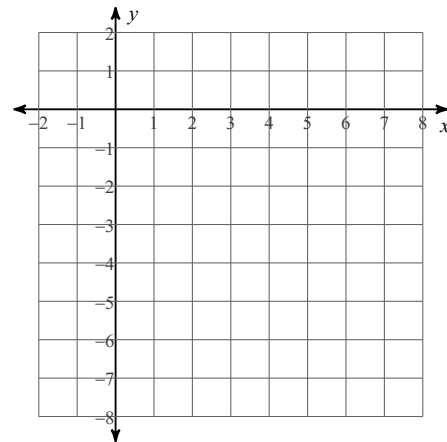
16) $x^2 = 1 - 9x$

Sketch the graph of each function.

17) $y = x^2 - 8x + 15$



18) $y = -2(x - 2)^2 + 1$



Sketch the graph of each function.

Identify the Domain, Range, Intervals of Increase, Intervals of Decrease, Positive Intervals, Negative Intervals

19) $y = (x - 1)(x + 3)$

