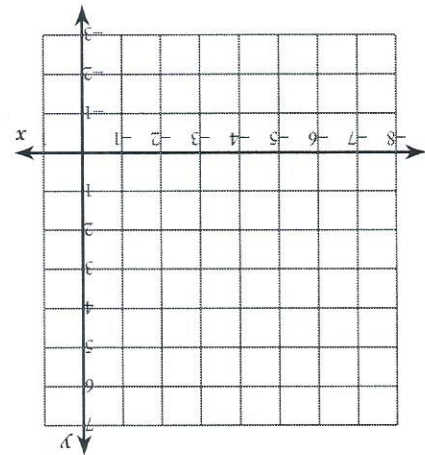
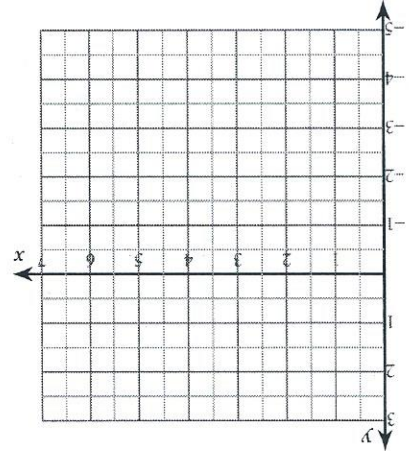


Identify the Vertex, AOS, the y-intercept, the zeros, domain and range, and state if it is a maximum or minimum. Make a table of values with the vertex as the center and sketch the function.

1) $y = 2x^2 + 16x + 30$



2) $y = -(x - 4)^2 + 1$



Solve each equation by factoring.

3) $p^2 + 10p - 11 = 0$

4) $11n^2 + 11n + 9 = 9$

5) $4a^2 - 52a + 158 = -2$

6) $3r^2 + 13r + 10 = -2$

$$9) 2n^2 - 8 = -35$$

$$10) 7a^2 - 7 = -133$$

Solve each equation with the quadratic formula.

$$11) 6p^2 + 8p - 8 = 0$$

$$12) 6n^2 + 3n - 75 = -12$$

$$13) n^2 - 3n = -4$$

$$14) 11x^2 = -2x - 2$$

Solve each equation by completing the square.

$$15) b^2 + 6b - 55 = 0$$

$$16) b^2 - 4b + 24 = 3$$

$$17) m^2 - 20m + 33 = -10$$

$$18) n^2 + 6n + 73 = -9$$