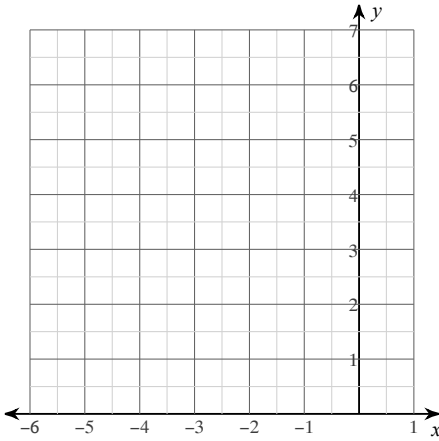


HW: Graphing Quadratics and Solving by Factoring DUE WED 3/29

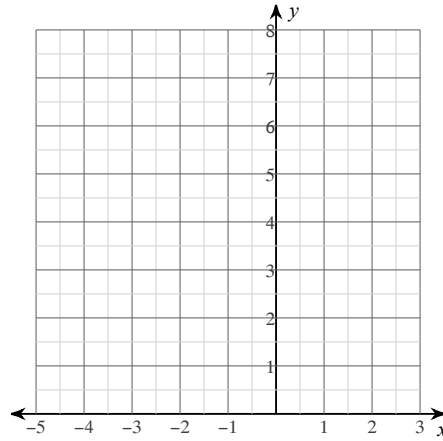
Period \_\_\_\_\_

Sketch the graph of each function.

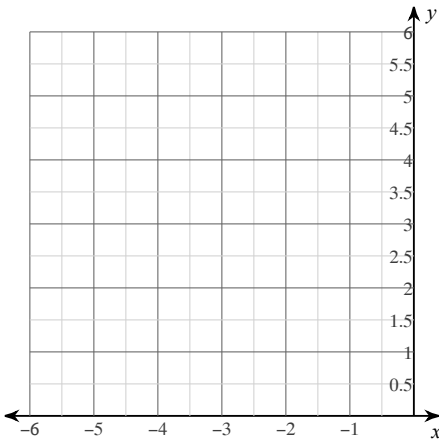
1)  $f(x) = x^2 + 8x + 18$



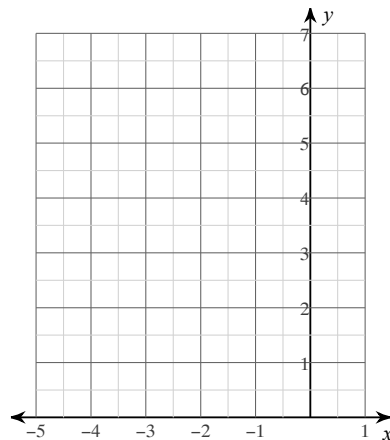
2)  $f(x) = x^2 + 2x + 4$



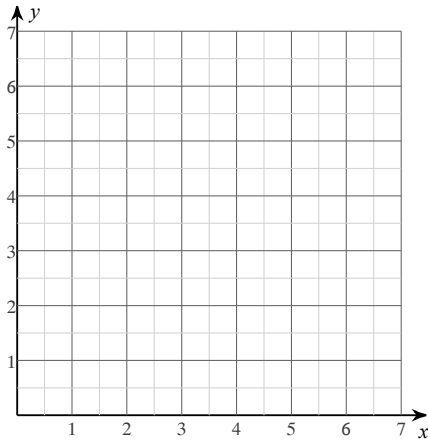
3)  $f(x) = x^2 + 4x + 5$



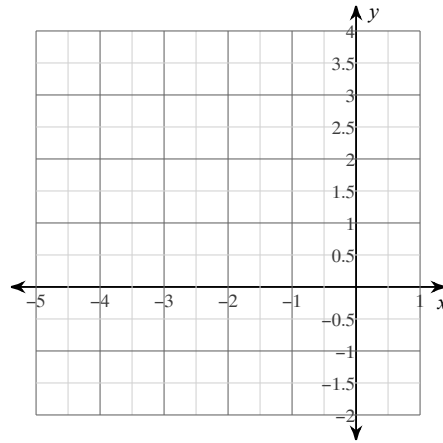
4)  $f(x) = (x + 2)^2 + 2$



$$5) f(x) = (x - 4)^2 + 2$$



$$6) f(x) = (x + 1)^2 - 1$$



**Solve each equation by factoring.**

$$7) m^2 + 6m - 16 = 0$$

$$8) k^2 + 3k + 2 = 0$$

$$9) p^2 - 8p + 7 = 0$$

$$10) x^2 - 49 = 0$$

$$11) x^2 + 12x + 35 = 0$$

$$12) x^2 - 4x + 3 = 0$$

$$13) r^2 + 8r + 15 = 0$$

$$14) x^2 + 16x + 64 = 0$$

$$15) n^2 + 2n - 48 = 0$$

$$16) x^2 + 4x - 32 = 0$$

$$17) b^2 - 12b + 32 = 0$$

$$18) n^2 - 4n - 21 = 0$$

$$19) a^2 + a - 12 = 0$$

$$20) n^2 - 3n - 40 = 0$$