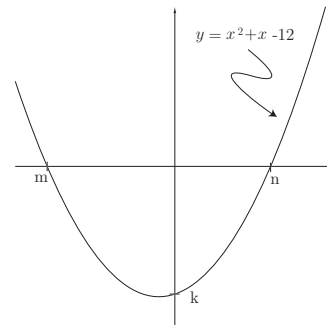


Show all relevant work!

1. Write a quadratic equation for which $x = 3$ and $x = -5$ are solutions.

2. Repeat (1) where $x = -5$ and $x = \frac{3}{4}$ are solutions.

3. The graph of $y = x^2 + x - 12$ is shown to right.
Find the values of the intercepts k , m , and n (without a calculator).

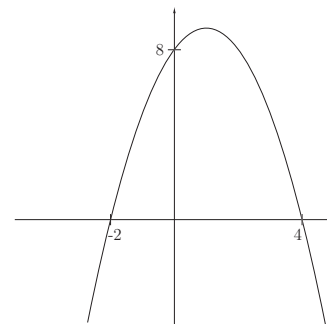


4. Factor $-3x^2 + 12x - 9$ completely.

5. Write an equation for a parabola with x -intercepts at $x = 2$ and $x = \frac{3}{5}$.

6. Repeat (5) but write an equation for a *different* parabola with x -intercepts at $x = 2$ and $x = \frac{3}{5}$.

7. The graph of a parabola of the form $y = ax^2 + bx + c$ is shown to right.
Find the equation of this parabola using the given intercepts.



8. For practice . . . solve.

(a) $\sqrt[3]{x} = 7$

(b) $x^3 = 7$

(c) $x^{-2} = 7$

(d) $2^x = 7$