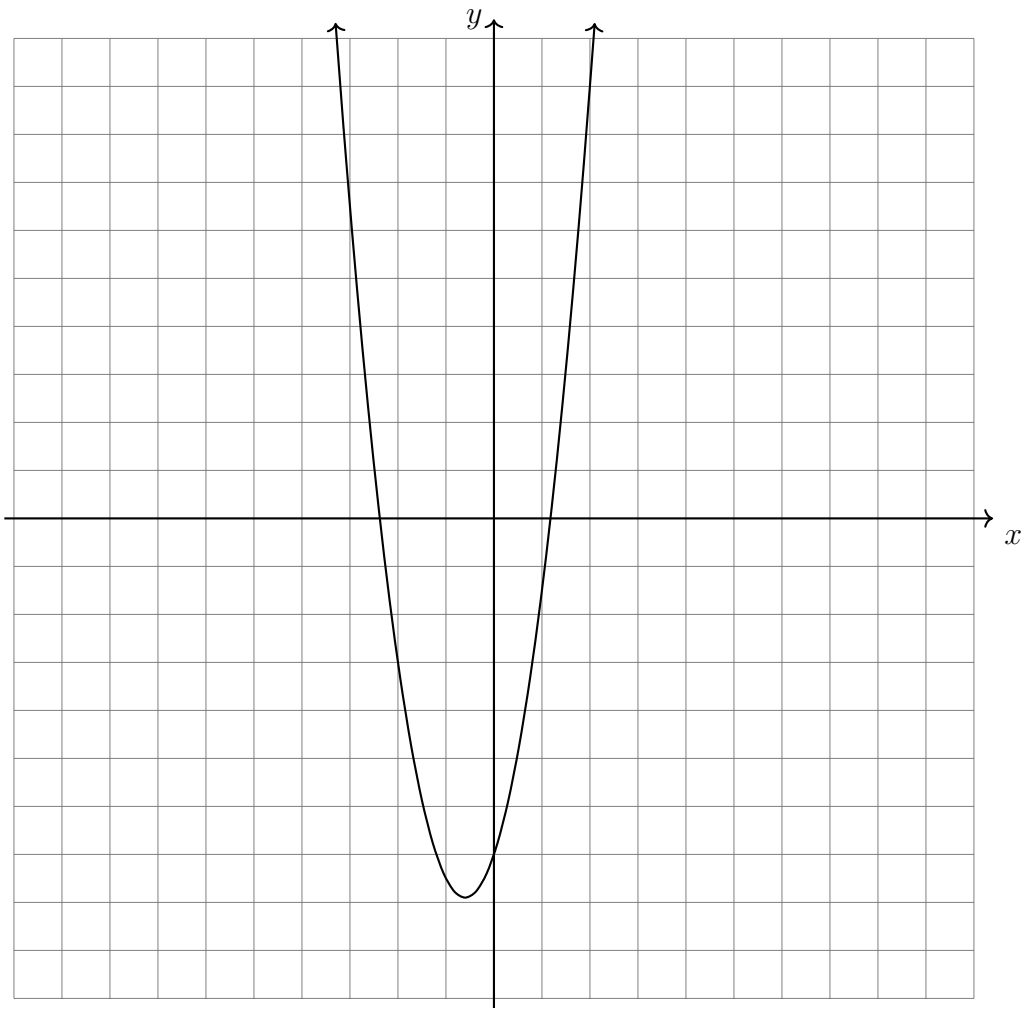
BECA / Dr. Huson / Regents Prep: Graphs First and last name:
18 November 2024 Section:

3.4 Do Now: Graphing quadratic systems

1. One equation of a system is graphed.
   (a) Graph the second equation, labeling the intersections as ordered pairs.
   (b) Find the value of the leading coefficient a of the quadratic equation.

$y = ax^2 + 3x - 7$ $3x - y = -3$



2. Identify the expressions that are equal to $\dfrac{4^2}{4^4}$

   (a) $\dfrac{1}{4^2}$

   (b) 4^{-2}

   (c) $\frac{1}{16}$

   (d) 4^6

   (e) 4^2

   (f) 0.0625

3. Identify the expressions that are equal to 4^{-2}

   (a) $\dfrac{1}{4^2}$

   (b) 0.0625

   (c) $\dfrac{1}{16}$

   (d) 4.25

   (e) 2

   (f) $\sqrt{4}$

4. Identify the expressions that are equal to $27^{\frac{1}{3}}$

   (a) 3

   (b) 9

   (c) $\sqrt[3]{27}$

   (d) 27.33

   (e) 1.5

   (f) 81

5. The graph of the function $f(x) = x^3 - 3x^2 - 4x + 12$ is shown. Write the function in factored form.