

Practice: Find the x and y intercepts of each rational function:

$$1) \quad f(x) = \frac{x^2 - 9}{x^2 + 2}$$

$$2) \quad f(x) = \frac{x - 4}{x + 5}$$

$$3) \quad f(x) = \frac{x^2 - 3x - 10}{x^2 - 8}$$

$$4) \quad f(x) = \frac{x^2 - 5x + 4}{x^2 - 4x - 1}$$

$$5) \quad f(x) = \frac{x^2 + 4}{x^2 - 2}$$

Answers: 1) x-int. $(3, 0)$ and $(-3, 0)$ y-int. $(0, \frac{-9}{2})$ 2) x-int. $(4, 0)$ y-int. $(0, \frac{-4}{5})$ 3) x-int. $(-2, 0)$ and $(5, 0)$ y-int $(0, \frac{5}{4})$ 4) x-int. $(1, 0)$ and $(4, 0)$ y-int $(0, -4)$ 5) x-int: none y-int: $(0, -2)$