

Graph each of the following using properties of zeros, vertical asymptotes and missing points in rational functions

$$1. y = \frac{x^3 + 4x^2 + 4x}{x^2 - 4x - 5}$$

$$3. y = \frac{x^4 + 5x^3 - 4x^2}{x^2 - 4x + 3}$$

$$5. y = \frac{x^2 - 1}{x^5 + 3x^4 + 2x^3}$$

$$2. y = \frac{2x^2 - 5x - 3}{x^2 + 2x - 3}$$

$$4. y = \frac{x^2 + x - 12}{x^2 + 4x + 4}$$

$$6. y = \frac{(x-3)^2(x+2)(x-1)}{(x-1)(x-4)^2(x-5)}$$