

5.2 Exercises

Precalculus

Domain

Name: _____

$$5) \quad k(x) = \frac{x^2 - 3x + 6}{x^2 - 3x - 10}$$

$$6) \quad m(x) = \frac{2x}{\sqrt{x^2 - 9}}$$

For each of the following functions, determine the domain algebraically (and confirm graphically). Write in interval notation.

$$1) \quad f(x) = 3x^2 - 6$$

$$2) \quad g(x) = \frac{1}{x - 1}$$

$$3) \quad h(x) = \sqrt{3 - x}$$

$$4) \quad j(x) = \frac{\sqrt{x}}{x - 4}$$

$$7) \quad n(x) = \sqrt{8x^3 - 24x^2}$$

$$8) \quad p(x) = \frac{\sqrt{x - 3}}{\sqrt{x + 4}}$$