

PRECALCULUS

Name: _____

Domain and Range Worksheet

For each of the following functions, determine the domain algebraically (and confirm graphically), and determine the range graphically.

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

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

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

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

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

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

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

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