## Precalculus Unit 1: Section 1.2 Worksheet Domain of a Function

For each of the following functions, find the domain using both words and symbols.

Function

Domain

- 1. f(x) = 3x 2
- 2.  $f(x) = 1 + \frac{1}{x}$
- 3.  $f(x) = x^3 2x 1$
- 4.  $f(x) = \sqrt{x+2}$
- 5.  $f(x) = \frac{1}{x-3}$
- $6. \quad f(x) = \frac{x}{x^2 x 6}$
- 7.  $f(x) = 4 x^2$
- 8.  $f(x) = \sqrt{9 x^2}$  \*\*Make sure you really stop to think about this one.\*\*
- 9.  $A = 4\pi r^2$  Surface Area of a Sphere

- 10. Write the equation for the line through the point (7, -5) that is:
  - a. Parallel to 3x 6y = 8

b. Perpendicular to 3x - 6y = 8