## Second Quiz for Math 30

Name: \_\_\_\_\_

1. Find the domain, the range and the formula for  $f^{-1}$ , where

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

2. Verify that the following is a pair of inverse functions:  $f(x) = x^2 + 2x + 1$  with domain  $[-1, \infty)$  and  $g(x) = \sqrt{x} - 1$ .

3. Find the formula for  $(f \circ g)(x)$ , where

$$f(x) = \frac{2x-1}{x}, \qquad g(x) = \frac{-2}{3x+1}$$