



# Inverse of Rational Functions

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

Date: \_\_\_\_\_

Score: \_\_\_\_\_

Direction: Find the inverse of each rational function. State the domain and range. Show all your work in the space provided.

1)  $f(x) = \frac{1}{2x-1}, x \neq \frac{1}{2}$

2)  $f(x) = \frac{x+2}{x-2}, x \neq 2$

3)  $f(x) = \frac{x-7}{x}, x \neq 0$



# Inverse of Rational Functions

Version 1

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

Date: \_\_\_\_\_

Score: \_\_\_\_\_

Direction: Find the inverse of each rational function. State the domain and range. Show all your work in the space provided.

$$1) f(x) = \frac{1}{2x-1}, x \neq \frac{1}{2}$$

$$f^{-1}(x) = \frac{x+1}{2x}; \text{ Domain: } x \neq 0, \text{ Range: } y \neq \frac{1}{2}$$

$$2) f(x) = \frac{x+2}{x-2}, x \neq 2$$

$$f^{-1}(x) = \frac{2x+2}{x-1}; \text{ Domain: } x \neq 1, \text{ Range: } y \neq 2$$

$$3) f(x) = \frac{x-7}{x}, x \neq 0$$

$$f^{-1}(x) = \frac{7}{1-x}; \text{ Domain: } x \neq 1, \text{ Range: } y \neq 0$$