

**Practice of Section 1.6**

1. Given  $f(x) = 2x-1$  and  $g(x) = x^2+3$

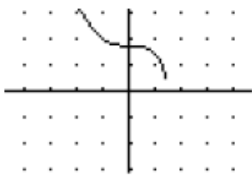
Find

$$(f+g)(x) \qquad (g \circ f)(x)$$

$$\frac{g}{f}(x) \qquad (f \circ f)(-3)$$

$$(fg)(2) \qquad (fg)(-1) - g(2)$$

2. Sketch the inverse of this function



3. Determine the inverse of these functions:

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

4. Given  $f(x) = 2x-1$  and  $g(x) = x^2 - 3$  domain:  $(0, \infty)$

$$\text{Determine } f^{-1}(3) \qquad g^{-1}(-1)$$