

## ***Intermediate Algebra Skill***

### **Finding the Inverse of a Linear Function**

Find the inverse of the given function:

$$1) f(x) = \frac{5}{6}x - \frac{1}{3}$$

$$2) f(x) = \frac{2x}{3}$$

$$3) f(x) = \frac{-5x-5}{4}$$

$$4) g(x) = 6x - 5$$

$$5) g(x) = \frac{4+x}{2}$$

$$6) g(x) = 2 + \frac{1}{3}x$$

$$7) h(x) = 4x + 3$$

$$8) h(x) = 2x + 2$$

$$9) h(x) = 3 + \frac{5}{4}x$$

$$10) f(x) = -x - 3$$

## Answers to Finding the Inverse of a Linear Function

$$1) f^{-1}(x) = \frac{6}{5}x + \frac{2}{5}$$

$$2) f^{-1}(x) = \frac{3x}{2}$$

$$3) f^{-1}(x) = \frac{-5-4x}{5}$$

$$4) g^{-1}(x) = \frac{1}{6}x - \frac{5}{6}$$

$$5) g^{-1}(x) = 2x - 4$$

$$6) g^{-1}(x) = 3x - 6$$

$$7) h^{-1}(x) = \frac{x-3}{4}$$

$$8) h^{-1}(x) = \frac{-2+x}{2}$$

$$9) h^{-1}(x) = \frac{4}{5}x - \frac{12}{5}$$

$$10) f^{-1}(x) = -x - 3$$