

**Exercise 1** If you know that  $\lim_{x \rightarrow 0} \frac{f(x)}{x} = 3$  and  $\lim_{x \rightarrow 0} g(x) = 2$ , then evaluate the following limit:

**Hint:** Multiply numerator and denominator by  $x$ .

$$\lim_{x \rightarrow 0} \frac{f(x)}{g(x)} = \boxed{0}$$

---