10350 Rational Functions - Sample Questions Set $02\,$

Let $f(x) = \frac{1}{2x-1}$. Simplify the following expressions as far as possible with the given assumptions.

1. Assume that $h \neq 0$.

$$\frac{f(x+h) - f(x)}{h} \stackrel{?}{=}$$

2. Assume that $x \neq 2$.

$$\frac{f(x) - f(2)}{x - 2} \stackrel{?}{=}$$