Find the average rate of change

1. \( f(x) = \frac{1}{x - 2} \) \( \text{between [1, 4]} \)

Find the instantaneous rate of change (slope) of the tangent line for the function below at the given value of \( x \).

2. \( f(x) = \frac{1}{x - 2} \) \( \text{at } x = 3 \)