

Worksheet 4
10/4/2022

1. Guess the value of the limit

$$\lim_{t \rightarrow 0} \frac{t^2 + 1}{t}$$

2. Guess the value of the limit

$$\lim_{x \rightarrow 2} \frac{\sqrt{x+2} - 2}{x - 2}$$

3. Guess the value of the limit

$$\lim_{x \rightarrow 0} x \sin\left(\frac{1}{x}\right)$$

4. Find the slope of the tangent line to the hyperbola $y = \frac{1}{x}$ at the point $(2, \frac{1}{2})$.