

AP Calculus: Homework 2

1. $\lim_{x \rightarrow 2} \frac{\sqrt{x} - \sqrt{2}}{x - 2} =$

2. $\lim_{x \rightarrow 4} \frac{4 - x}{2 - \sqrt{x}} =$

3. $\lim_{x \rightarrow 25} \frac{x - 25}{5 - \sqrt{x}} =$

4. $\lim_{x \rightarrow 9} \frac{\sqrt{x} - 3}{x^2 - 9x} =$

5. $\lim_{x \rightarrow 0} \frac{\frac{1}{x+2} - \frac{1}{2}}{x} =$

6. $\lim_{t \rightarrow 9} \frac{t^2 - 81}{\sqrt{t} - 3} =$

7. $\lim_{x \rightarrow 0} \frac{\sqrt{x^2 + 9} - 3}{x^2} =$

8. $\lim_{x \rightarrow 0} \frac{\sqrt{3+x} - \sqrt{3}}{x} =$

9. $\lim_{x \rightarrow 0} \frac{x}{\sqrt{1+3x} - 1} =$

10. $\lim_{x \rightarrow 1} \frac{\sqrt{x} - x^2}{1 - \sqrt{x}} =$