

Show all work. 5 points each.

1) Evaluate the limits

$$\lim_{x \rightarrow 1} \frac{x^2 + 1}{x}$$

$$\lim_{t \rightarrow 9} \frac{9 - t}{3 - \sqrt{t}}$$

2) Prove the state met using the δ, ϵ definition of a limit.

$$\lim_{x \rightarrow 1} 2x + 3 = 5$$