

Show all work clearly and in order, and circle your final answers.

Justify your answers algebraically whenever possible. Unjustified work may not receive full credit.

You have 25 minutes to complete this 10 point exam.

1. (3 points) Find the limit

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

2. (3 points) Find the limit

$$\lim_{x \rightarrow 1^+} \frac{2x^2 + 3x + 7}{x - 1}$$

3. (4 points) Find the limit

$$\lim_{t \rightarrow 4} \frac{t - \sqrt{3t + 4}}{4 - t}$$