9 Limits

Marks

1. What is a limit? [5]

2. $\lim_{x\to 2} \frac{x^2-x-2}{x-2} = 3$. Describe what this means in words [1]

3. Evaluate: [1]

   A. $\lim_{x\to 0} \frac{x^2+3x}{x}$

   B. $\lim_{x\to 3} \frac{x^2-3x}{x-3}$

   C. $\lim_{h\to 0} \frac{h^5+2h}{h}$

   D. $\lim_{t\to 4} \frac{t^2-16}{t-4}$

   E. $\lim_{x\to -1} \frac{x^2+4x+3}{x^2-1}$