

NAME _____

1. Find the following limit if it exists

$$\lim_{t \rightarrow 1} \frac{t^3 - 6t^2 + 9t - 4}{t^3 + 2t^2 - 7t + 4}$$

2. Find the equation of the line tangent to

$$y = \left(\frac{1}{x} - \frac{1}{x^2} \right)^{-1}$$

passing through the point $(2, 4)$.