

M-109 QUIZ#2

Name _____

1. Find the following limit

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

2. Determine the value of h that makes the following function continuous at $x = -1$

$$f(x) = \left\{ \begin{array}{ll} 2x^2 + h & , x \neq -1 \\ 4 & , x = -1 \end{array} \right\}$$

3. Differentiate the following function

$$h(t) = \left(t^2 + \frac{1}{t}\right)(5\sqrt{t})$$

4. Find y''' where

$$y = t^2 - t^3$$