

Name _____

You have 13 minutes for this quiz – no calculators allowed.

1. (4 points) Determine the x -coordinate of each point on the graph of the following function for which the line tangent to the curve is horizontal.

$$y = 6x^3e^{-x}$$

2. (2 points each) Find derivatives of each of the following functions. You should always use proper notation.

(a) $h(t) = \csc(e^{3t})$

$$(b) \ w = \left(\frac{5x}{2x+3} \right)^4$$

$$(c) \ f(x) = e^{2 \ln(\sqrt{x^2+5})}$$