

Name _____

- No calculators allowed.
- Show sufficient work to justify each answer.
- You have 15 minutes for this quiz.

1. (2 points each) Differentiate the following functions.

(a) $y = (2x + 5)^6$

(b) $g(x) = \sin^5 x$

2. (3 points each) Differentiate the following functions.

(a) $h(t) = t^3 e^{-2t}$

(b) $f(x) = \frac{1}{\sqrt{\sin(e^{4x})}}$