

Quiz 12

Name: _____

1. Find the derivatives of these functions. You do not need to simplify your results.

(a) $f(x) = e^x \cos(x)$

(b) $g(x) = \tan(x)$

Since $\tan(x) = \frac{\sin(x)}{\cos(x)}$,

$$f'(x) = -e^x \sin(x) + e^x \cos(x)$$

$$g'(x) = \frac{(\cos(x)) \cos(x) - (-\sin(x)) \cos(x)}{\cos^2(x)} = \frac{1}{\cos^2(x)}.$$