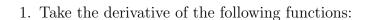
Chapter 3.5: Differentiating Trig Functions Calculus I

College of the Atlantic. Fall 2014



(a)
$$f(x) = \tan(2x)$$

(b)
$$f(x) = \cos(x)\sin(x)$$

(c)
$$f(x) = e^{-\cos(2x)}$$

(d)
$$f(x) = \sin^2(x)$$

(e)
$$f(x) = \sin(x^2)$$

2. Take the derivative of $f(x) = \sin(2x)$. Sketch f(x) and f'(x). Why do the graphs have the shape that they do?

3. Take the derivative of $g(x) = \sin(x^2)$. Sketch g(x) and g'(x). Why do the graphs have the shape that they do?