

## Trig Derivatives Day 1 HW Key

1.  $y' = 12 \cos(4x)$

2.  $y' = (2 - 3x^2) \sec^2(2x - x^3)$

3.  $y' = -(9x^2 + 4x) \sin(3x^3 + 2x^2 - 5)$

4.  $y' = \frac{72 \cos x}{(9 - 2 \sin x)^2}$

5.  $y' = -12 \sin(4x) \cos^2(4x)$

6.  $y' = 6 \sin^5(x) \cos(x)$

7.  $y' = 4x^4(5 \cos(2x) - 2x \sin(2x))$

8.  $y' = \sin^2 x(3 \cos x \tan(4x) + 4 \sin x \sec^2(4x))$

9.  $y' = 6 \sin(3x - 2) \cos(3x - 2)$

10. 3