

Trigonometry Differentiation Worksheet

Section I:  
Find  $dy/dx$

1)  $y = \sin(2x)$

2)  $y = \cos x^4$

3)  $y = \cos^2 x$

4)  $y = \tan^3(3x)$

5)  $y = \sec(3x)$

Section II:  
Find  $y'$

1)  $y = x^2 \sin^2 x$

2)  $y = 5\csc(3x)$

3)  $y = \frac{3\sin x}{(2x + 5)}$

4)  $y = \sin^2(4x) + \cos^2(4x)$

5)  $y = 4\sin x \cos x$

Section III:  
Find  $dy/dx$

1)  $\sin(xy) + 3x = 4$

2)  $\sin y + \cos x = 1$