Trigonometrical Functions

differentiate with respect to **x** :

1.
$$y = \sin(3x)$$

2.
$$y = \cos(4x)$$

3.
$$y = \tan(2x)$$

4.
$$\frac{1}{\cos(2x)}$$

5.
$$\frac{1}{\sin(4x)}$$

6.
$$\frac{1}{\tan(5x)}$$

7.
$$y = \sin(x^2)$$

8.
$$y = \cos(2 - 3x)$$

9.
$$\frac{1}{\cos(2x - 1)}$$

10.
$$\frac{1}{\tan(3 - 2x)}$$

Trigonometrical Functions

answers:

1.
$$3\cos(3x)$$

2.
$$-4\sin(4x)$$

3.
$$2\tan^2(2x)+2$$

4.
$$\frac{2\sin(2x)}{\cos^2(2x)}$$

5.
$$-\frac{4\cos(4x)}{\sin^2(4x)}$$

6.
$$-\frac{5\tan^2(5x)-5}{\tan^2(5x)}$$

7.
$$2x\cos(x^2)$$

8.
$$-3\sin(3x-2)$$

9.
$$\frac{2\sin(2x-1)}{\cos^2(2x-1)}$$

10.
$$\frac{2\tan^2(2x-3)+2}{\tan^2(2x-3)}$$