WHAT DO YOU CALL A CERTAIN TYPE OF SMALL BLACK INSECT THAT IS ILL?

Derivatives of the Six Trigonometric Functions:

$y = \sin(x)$	$y = \cos(x)$	$y = \sec(x)$	$y = \csc(x)$	$y = \tan(x)$	$y = \cot(x)$
$y' = \cos(x)$	$y' = -\sin(x)$	$y' = \sec(x)\tan(x)$	$y' = -\csc(x)\cot(x)$	$y' = \sec^2(x)$	$y' = -\csc^2(x)$

Find each derivative.

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

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

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

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

5) $y = \cos(x + \frac{\pi}{3})$

6) $y = \cos(\frac{\pi}{3} - x)$

7) $y = \frac{1}{3}\sec(3x)$

8) $y = \sin(\frac{1}{3}x)$

9) $y = \frac{1}{2}\cos(x^2)$

10) $y = \frac{1}{2}\cot(x^2)$

11) $y = \frac{1}{3}\tan(x^3)$

12) $y = \cot(\pi)$

13) $y = \sin^2(x)$

14) $y = \frac{1}{2}\cos\left(\frac{1}{x^2}\right)$

15) $y = \sin(\sec(x))$

16) $y = 4\sin(x)\cos(x)$

17) $y = \sec(x)\tan(x)$

Derivatives.

A. $y' = 0$

A. $y' = -\sin(x + \frac{\pi}{3})$

C. $y' = \sin(\frac{\pi}{3} - x)$

C. $y' = 2\sin(2x)$

D. $y' = \frac{1}{3}\cos(\frac{1}{3}x)$

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

I. $y' = 3\cos(3x)$

I. $y' = -x\sin(x^2)$

K. $y' = -x\csc^2(x^2)$

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

N. $y' = \sin(2x)$

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

S. $y' = \sec(3x)\tan(3x)$

S. $y' = \frac{1}{x^3}\sin\left(\frac{1}{x^2}\right)$

T. $y' = -3\csc(3x)\cot(3x)$

(. $y' = \sec(x)\tan(x)\cos(\sec(x))$

). $y' = \sec(x)[\sec^2(x) + \tan^2(x)]$

1	2

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7

6	12	16	16	3	8

5

14	3	4	12	11	2

15	7	9	4	10

5	13	2	17

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