HOW OFTEN DID THE STUDENT WHO GOT "C" ON HIS TRIG FUNCTIONS TEST DO HIS HOMEWORK?

$$f(x) = A\sin(Bx) \qquad f(x) = A\cos(Bx)$$

$$|A| = \text{Amplitude}$$

B represents the number of complete waves in an interval of 2π, therefore $\dfrac{2\pi}{B}$ = Period

1) $f(x) = 3\sin x$	2) $f(x) = \sin(2x)$	3) $f(x) = \sin\dfrac{x}{4}$	4) $f(x) = \cos\left(\dfrac{1}{2}x\right)$
5) $f(x) = \cos(3x)$	6) $f(x) = \dfrac{1}{2}\sin(3x)$	9) $f(x) = \dfrac{3}{2}\sin\left(\dfrac{1}{2}x\right)$	10) $f(x) = 2\cos(\pi x)$
7) $f(x) = 3\sin(2x)$	8) $f(x) = 3\cos x$	11) $f(x) = 3\sin\dfrac{x}{3}$	12) $f(x) = 2\cos(3x)$

Match each function from above with a graph below.

I. $y = 3\sin 2x$

C. $f(x) = \cos\frac{1}{2}x$

D. $f(x) = 3\sin x$

E. $f(x) = \sin 2x$

I. $y = \sin \frac{1}{4}x$

A. $f(x) = \frac{3}{2}\sin\left(\frac{1}{2}x\right)$

L. $y = \frac{1}{2}\sin 3x$

L. $f(x) = 2\cos 3x$

O. $y = \cos 3x$

P. Tough $f(x) = 2\cos \pi x$

R. $f(x) = 3\sin\frac{1}{3}x$

Y. $f(x) = 3\cos x$

P	E	R	I	O	D	I	C	A	L	L	Y
10	2	11	3	5	1	7	4	9	12	6	8