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

$$
f(x)=A \sin (B x) \quad f(x)=A \cos (B x)
$$

$|A|=$ Amplitude
$B$ represents the number of complete waves in an interval of $2 \pi$, therefore $\frac{2 \pi}{B}=$ Period

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

Match each function from above with a graph below.

C.


L.

I.


R.

D.

I.


Y.


|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 8 | 2 | 11 | 3 | 5 | 1 | 7 | 4 | 9 | 12 | 6 | 10 |

