Name Key

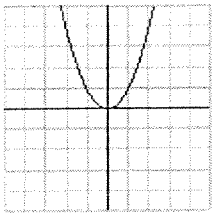
Hour _____

AP Physics: Math Review

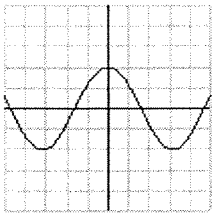
Graph Identification:

1. Each of the twelve graphs shown below can be described by one of the equations at right. Match each equation to its appropriate graph.

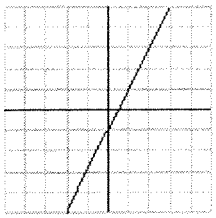
$y = \frac{1}{2} \cdot x + 1$	$y = x^2$	$y = \cos(x) + 1$
$y = \frac{1}{2} \cdot x - 1$	$y = -x^2$	$y = \sin(x) + 1$
$y = 2 \cdot x + 1$	$y = 2 \cdot x^2$	$y = 2 \cdot \cos(x)$
$y = 2 \cdot x - 1$	$y = -2 \cdot x^2$	$y = 2 \cdot \sin(x)$



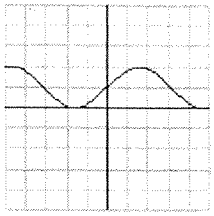
a) $y = x^2$



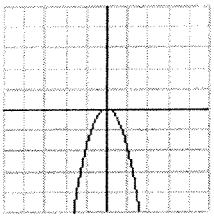
b) $y = 2\cos x$



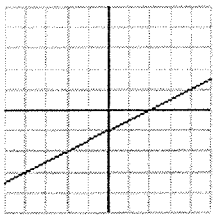
c) $y = 2x - 1$



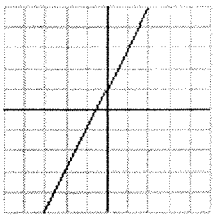
d) $y = \sin x + 1$



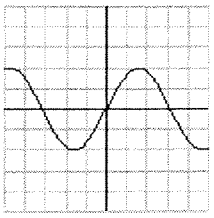
e) $y = -2x^2$



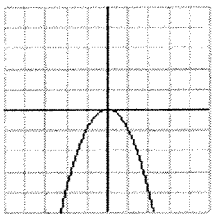
f) $y = \frac{1}{2}x - 1$



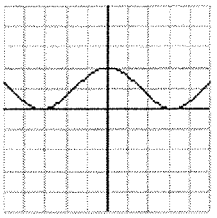
g) $y = 2x + 1$



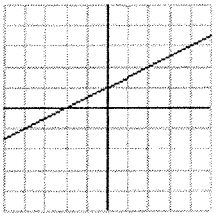
h) $y = 2\sin x$



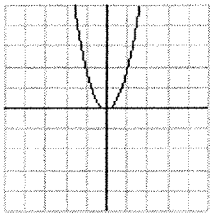
i) $y = -x^2$



j) $y = \cos x + 1$



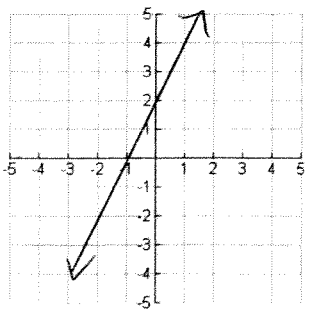
k) $y = \frac{1}{2}x + 1$



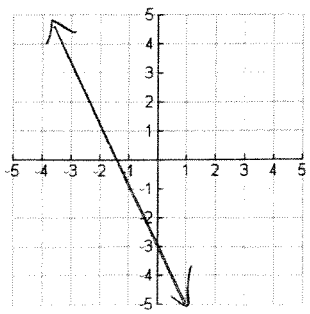
l) $y = 2x^2$

2. The general form of a linear equation is $y = m \cdot x + b$, where m represents the slope of the line and b represents the y-intercept. Use this form to graph each equation shown below.

a) $y = 2 \cdot x + 2$



b) $y = -2 \cdot x - 3$



c) $y = \frac{1}{2} \cdot x - 1$