6. $y = -2\cos\left(\frac{1}{8}x\right)$

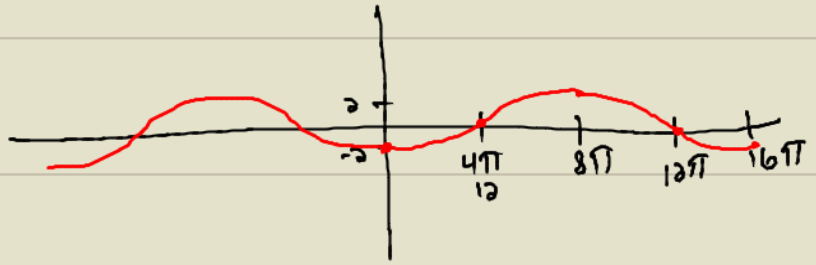
$|a| = |-2| = 2$

$\text{PERIOD} = \frac{2\pi}{b} = \frac{2\pi}{\frac{1}{8}} = 2\pi \cdot \frac{8}{1} = 16\pi$

	x	y
ZERO	0	$-2\cos\left(\frac{1}{8}\cdot 0\right) = -2\cos 0 = -2(1) = -2$
$\frac{1}{4}P$	4π	$-2\cos\left(\frac{1}{8}\cdot 4\pi\right) = -2\cos\frac{\pi}{2} = -2(0) = 0$
$\frac{1}{2}P$	8π	$-2\cos\left(\frac{1}{8}\cdot 8\pi\right) = -2\cos\pi = -2(-1) = 2$
$\frac{3}{4}P$	12π	$-2\cos\left(\frac{1}{8}\cdot 12\pi\right) = -2\cos\frac{3\pi}{2} = -2(0) = 0$
P	16π	$-2\cos\left(\frac{1}{8}\cdot 16\pi\right) = -2\cos 2\pi = -2(1) = -2$

$D: (-\infty, \infty)$

$R: [-2, 2]$



7. $y = 4\sin(\pi x) - 1$

down 1

4 ↘ 3

-4 ↘ -5

$|a| = |4| = 4$

$\text{PERIOD} = \frac{2\pi}{b} = \frac{2\pi}{\pi} = 2$

	x	$y = 4\sin(\pi x)$
ZERO	0	$4\sin(\pi\cdot 0) = 4\sin 0 = 4(0) = 0$
$\frac{1}{4}P$	$\frac{1}{2}$	$4\sin(\pi\cdot\frac{1}{2}) = 4\sin\frac{\pi}{2} = 4(1) = 4$
$\frac{1}{2}P$	1	$4\sin(\pi\cdot 1) = 4\sin\pi = 4(0) = 0$
$\frac{3}{4}P$	$\frac{3}{2}$	$4\sin(\pi\cdot\frac{3}{2}) = 4\sin\frac{3\pi}{2} = 4(-1) = -4$
PERIOD	2	$4\sin(\pi\cdot 2) = 4\sin 2\pi = 4(0) = 0$

$D: (-\infty, \infty)$

$R: [-5, 3]$