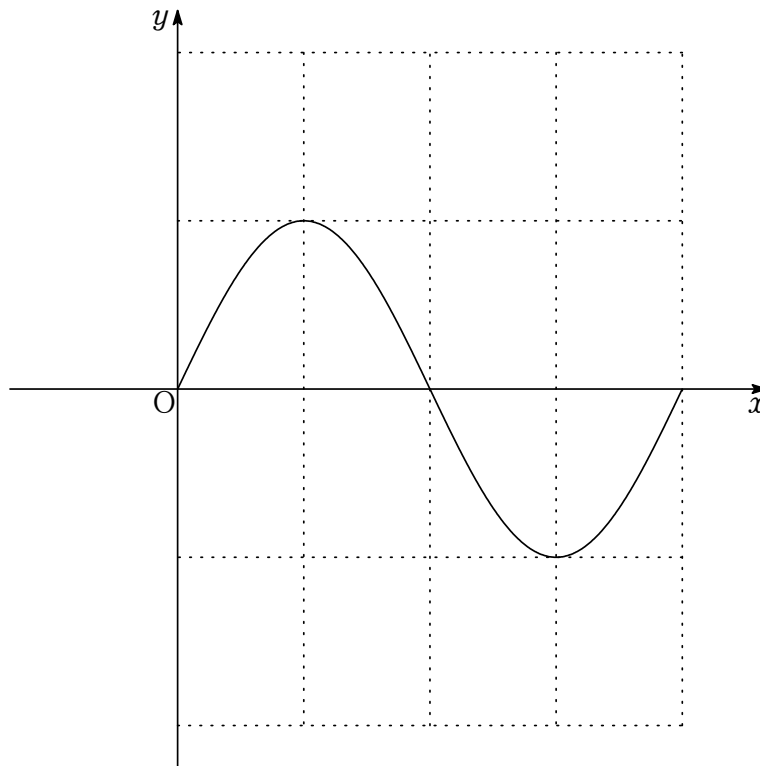
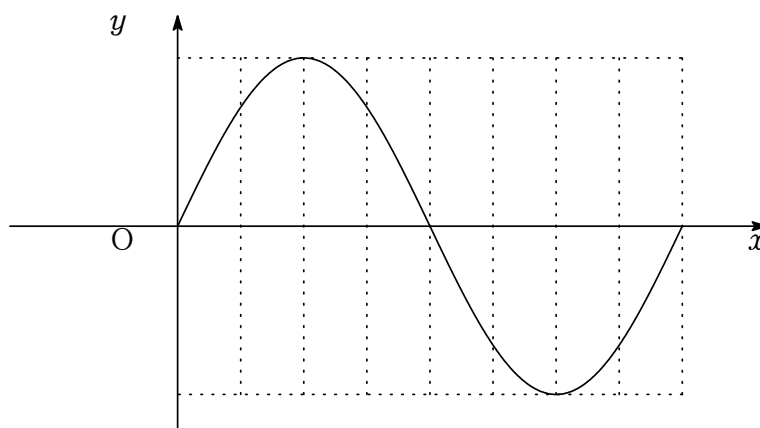


# グラフの伸び縮み

$\theta$	0	...	$\frac{\pi}{2}$	...	$\pi$	...	$\frac{3\pi}{2}$	...	$2\pi$
$\sin \theta$									
$2\sin \theta$									



$\theta$	0	...	$\frac{\pi}{4}$	...	$\frac{\pi}{2}$	...	$\frac{3}{4}\pi$	...	$\pi$
$\sin \theta$									
$2\theta$									
$\sin 2\theta$									

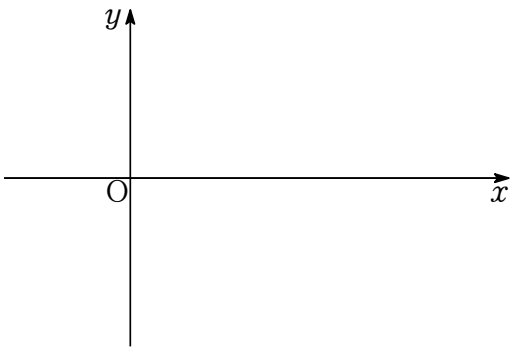


▷Point◁(三角関数のグラフの伸縮)

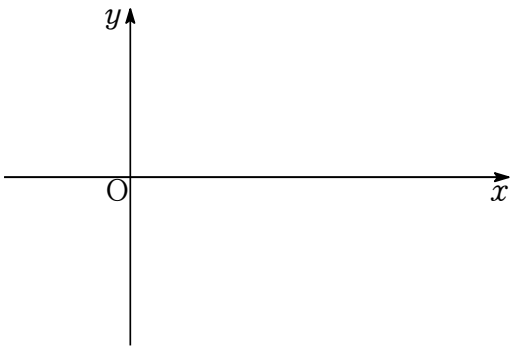
	伸縮の方向	グラフの概形	周期	振幅
$y = a \sin \theta \quad (a > 0)$				
$y = \sin k\theta \quad (k > 0)$				

**例題** 次の三角関数のグラフを書け.  $x$  切片,  $y$  切片も明記し, 最低 1 周期分は書くこと.

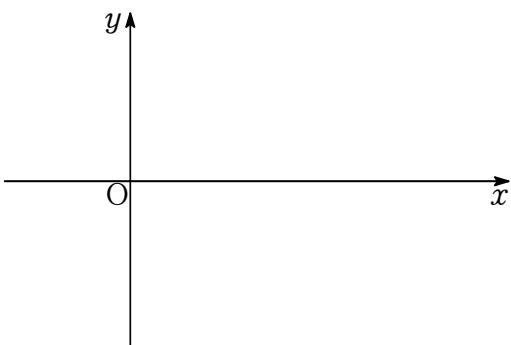
(1)  $y = \frac{1}{2} \sin \theta$



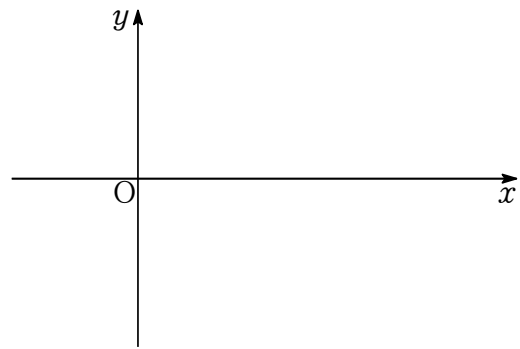
(2)  $y = -2 \cos \theta$



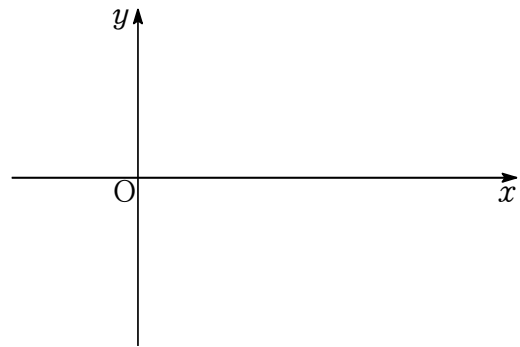
(3)  $y = \sin 3\theta$



(4)  $y = \cos \frac{\theta}{2}$



(5)  $y = 3 \sin 4\theta$



(6)  $y = \tan \frac{\theta}{2}$

