

## Practice Test

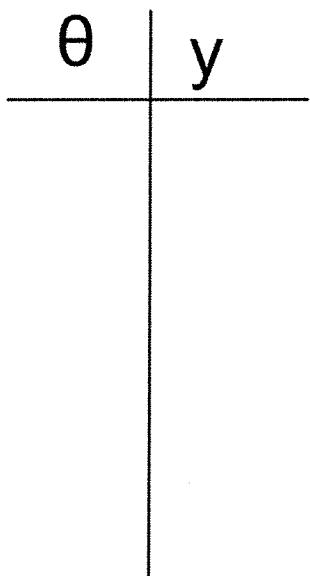
1.  $y = -3\cos\left(\frac{2}{3}\theta\right)$

- a) Find a
- b) Find amp
- c) Find b
- d) Find P
- e) What is the max? The min?

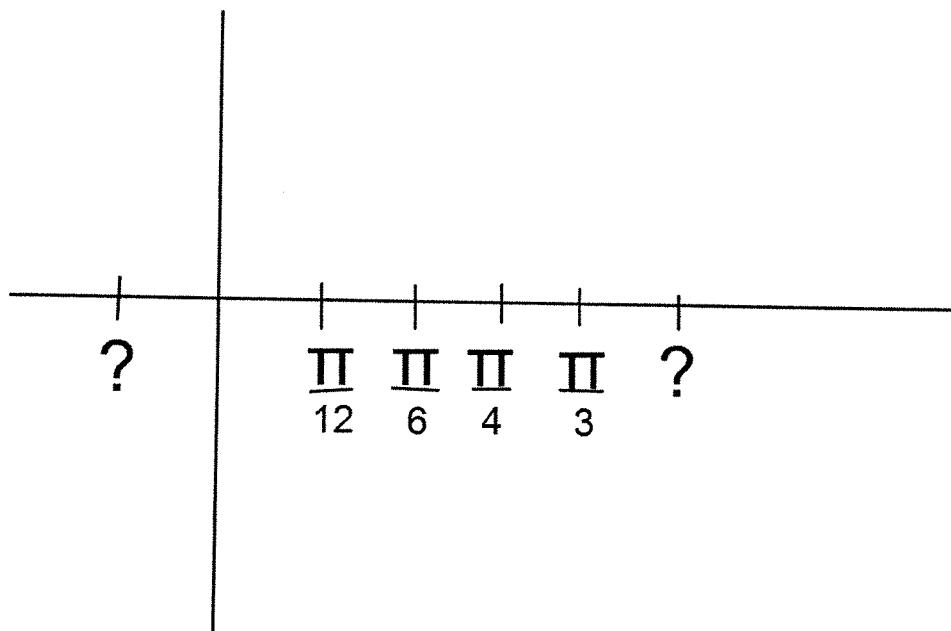
2. Make the table for  $y = 6 \sin(8\theta)$

Show a,b,P work

DO NOT GRAPH



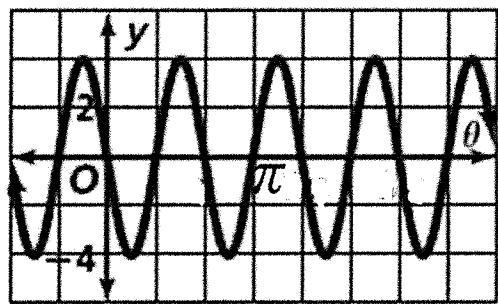
3. What are the missing labels on the graph?



4. Fill in the missing values then graph.

$\theta$	y
0	?
$\frac{5\pi}{4}$	- 3
$\frac{5\pi}{2}$	?
?	?
$5\pi$	?

5. Use the graph to answer the questions below



# Answers

## Practice Test

1.  $y = -3\cos\left(\frac{2}{3}\theta\right)$

a) Find a  $= -3$

b) Find amp  $= |-3| = 3$

c) Find b  $= \frac{2}{3}$

d) Find P  $= \frac{2\pi}{\frac{2}{3}} = \frac{2\pi}{1} \cdot \frac{3}{2} = \frac{6\pi}{2} = 3\pi$

e) What is the max? The min?

3

-3

2. Make the table for  $y = 6 \sin(8\theta)$

Show a,b,P work

DO NOT GRAPH

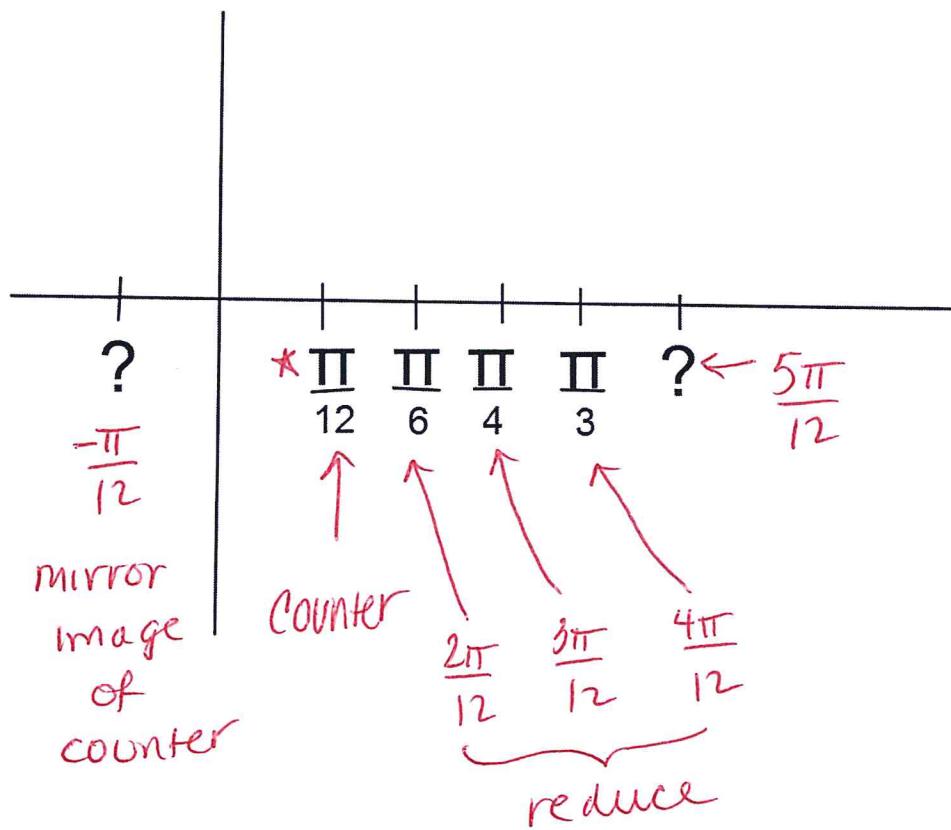
$\theta$	y
$0 \cdot \frac{\pi}{4} = 0$	0
$\frac{1}{4} \cdot \frac{\pi}{4} = \frac{\pi}{16}$	6
$\frac{1}{2} \cdot \frac{\pi}{4} = \frac{\pi}{8}$	0
$\frac{3}{4} \cdot \frac{\pi}{4} = \frac{3\pi}{16}$	-6
$1 \cdot \frac{\pi}{4} = \frac{\pi}{4}$	0

$$a=6$$
$$b=8$$
$$P=\frac{2\pi}{8}=\frac{\pi}{4}$$



If you don't  
do the 1st, 5th, 3rd, 2nd, 4th step around method

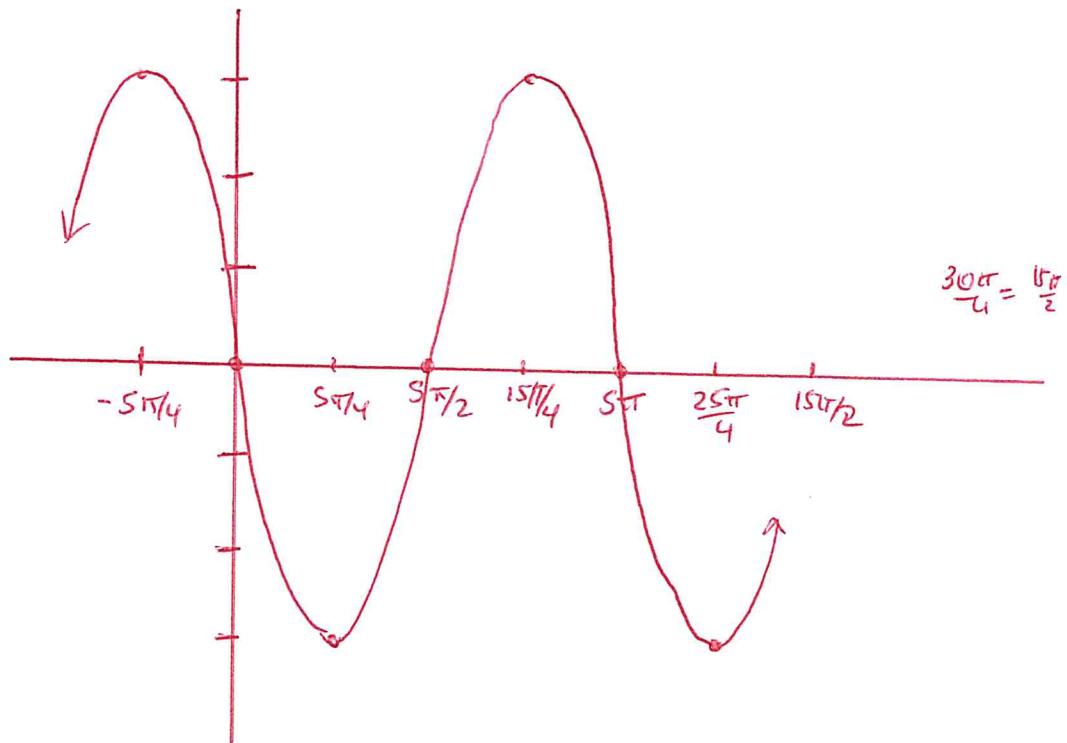
3. What are the missing labels on the graph?



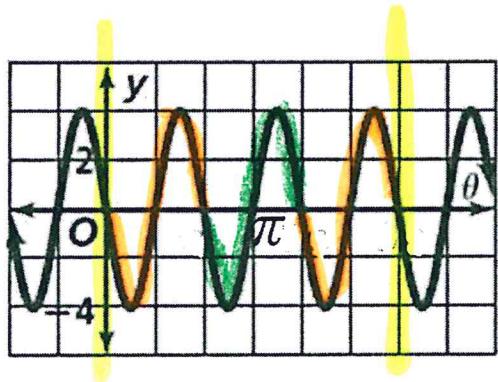
4. Fill in the missing values then graph.

$\theta$	y
0	? 0
* $\frac{5\pi}{4}$	- 3
$\frac{\pi}{4} + \frac{5\pi}{4} = \frac{10\pi}{4} = \frac{5\pi}{2}$	? 0
$\frac{0\pi}{4} + \frac{5\pi}{4} = ? \frac{5\pi}{4}$	? 3
$5\pi$	? 0

you go up  
by  $\frac{5\pi}{4}$  each time



5. Use the graph to answer the questions below



$$\text{amp} = 4 \text{ w/ reflection}$$

- a) Is this sine or cosine?    b) What is  $a$ ?  $= -4$
- c) What is  $b$ ?  $3$     d) What is  $P$ ?  $P = 2\pi/3$
- e) What is the eqn of this fcn?

$$y = -4 \sin 3\theta$$