Amplitude and Period Worksheet Key
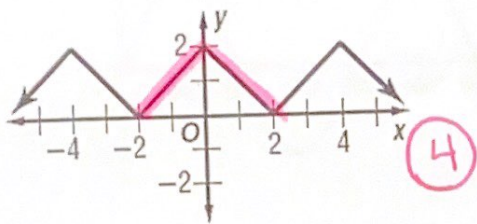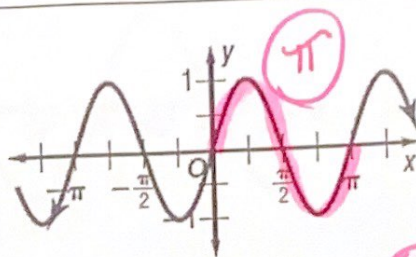
Directions: Find the period of each function by examining its graph.

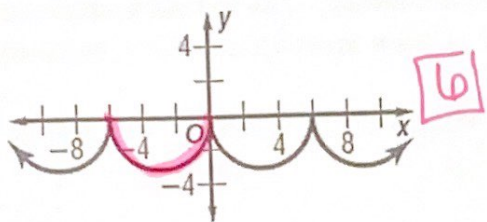1.

4

2.

π

3.

6

4.

$\frac{5\pi}{2}$

5.

6

6.
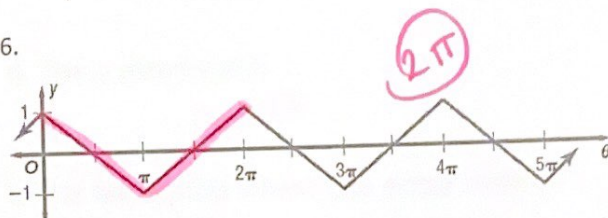
2π

7.

9

8.

8

9.

4

10.

2π

11.

2

12.

360°

The graphs show $y = \sin\theta$ and $y = \cos\theta$ with horizontal axis marked at 90°, 180°, 270°, 360°, 450°, 540°.
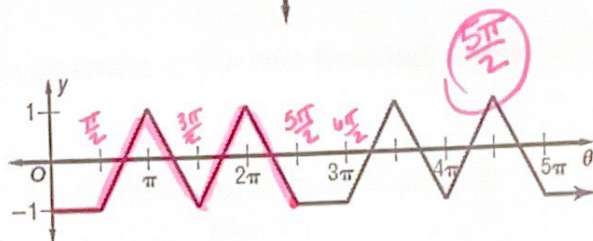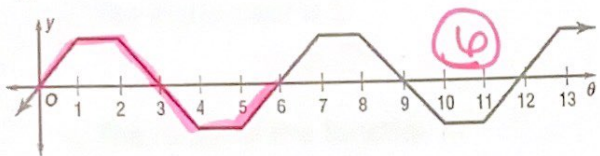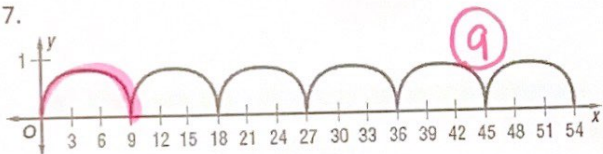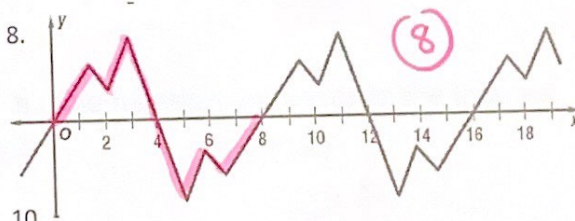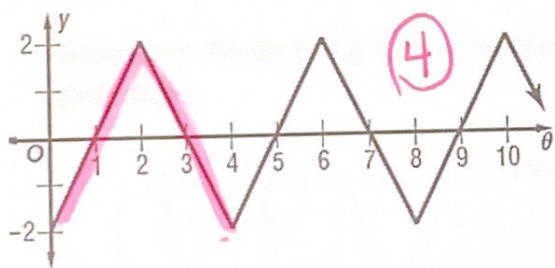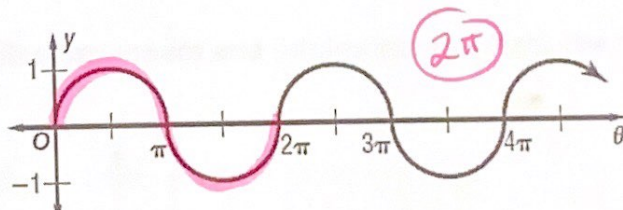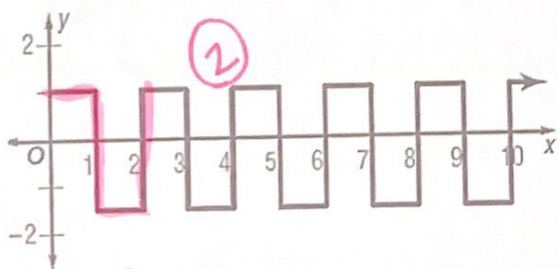
13. State whether each statement describes a characteristic of the sine function, cosine function, both functions or neither functions.

a. The function has a period of 360°

Both

b. The function has an amplitude of 2.

none

c. The y-intercept is 1.

Cosθ
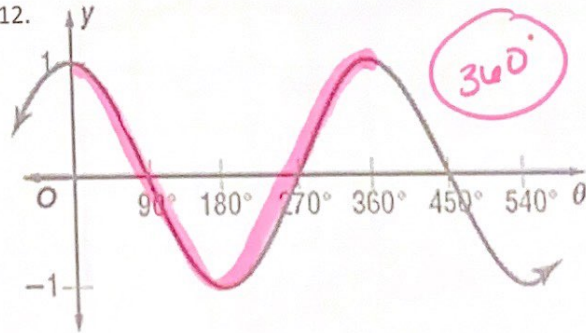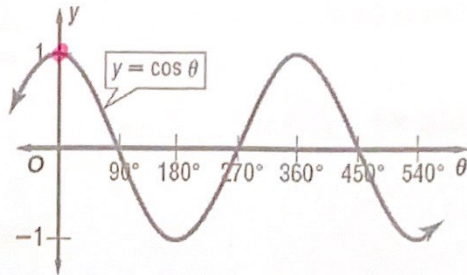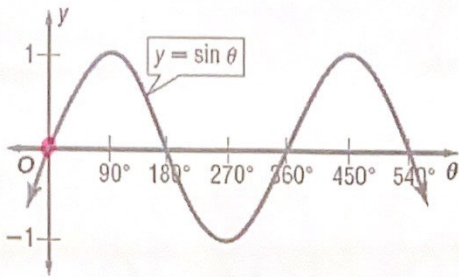
d. The y-intercept is 0.

Sinθ

e. The range of the function is $-1\leq y\leq1$.

Both

f. The horizontal intercepts occur only at multiples of 90°

Both

g. The function decreases in the interval $0°\leq\theta\leq90°$ *θ = x in our minds :)*

Cosine

h. The function increases in the interval $0°\leq\theta\leq90°$

Sinθ

Directions: Given the graph, identify the midline, maximum and minimum, and state the amplitude.

14.

max Y=5
Amp = 4
mid Y=1
Amp=4
min Y = -3

8 = mid / 2

15.

Y= 2.5 max
Y=1.5 min
mid y = 2
Amp = 0.5

10