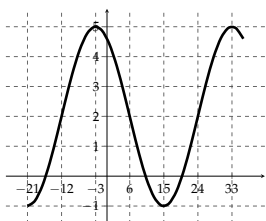


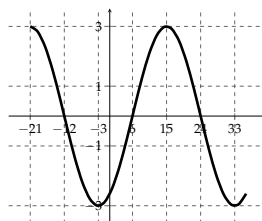
Unit 7 Exam

Q1 Select the graph of $y = -3 \cos 10(\theta + 3)$

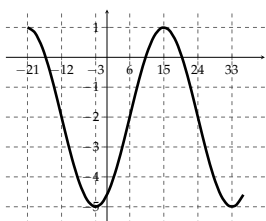
(A)



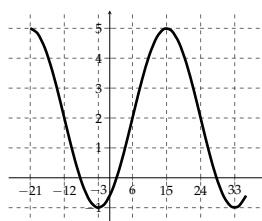
(C)



(B)



(D)



Q2 Convert 600° to radians.

(A) $\frac{20}{3}\pi$ rad

(C) $\frac{10}{3}\pi$ rad

(B) $\frac{3}{10}\pi$ rad

(D) $\frac{3}{20}\pi$ rad

Q3 Convert $\frac{17}{18}\pi$ rad to degrees.

(A) 191°

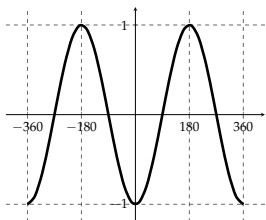
(C) 170°

(B) 340°

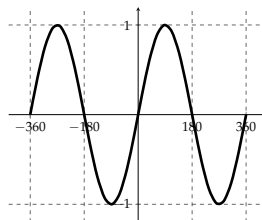
(D) 85°

Q4 Which is the graph of $y = \cos x$?

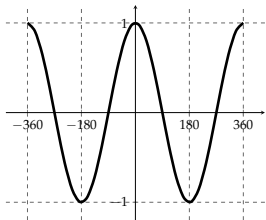
(A)



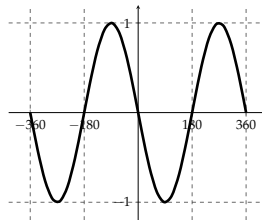
(C)



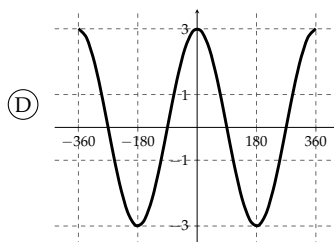
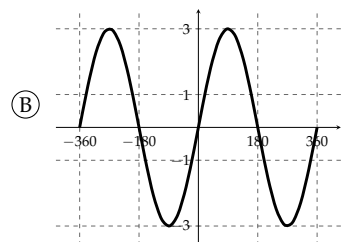
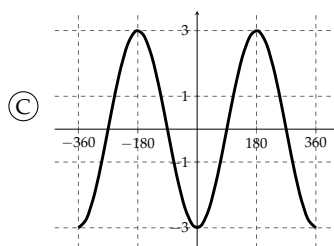
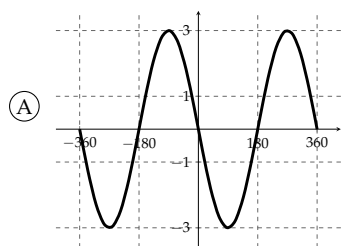
(B)



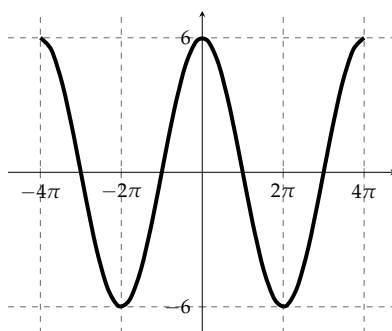
(D)



Q5 Which of the graphs accurately shows $y = -3 \cos \theta$?



Q6 Give the amplitude and period of the graph shown.



(A) Amplitude= 6; period = 4π

(C) Amplitude= 5; period = 4π

(B) Amplitude= 5; period = 2π

(D) Amplitude= 6; period = 2π

Q7 State the quadrant in which the terminal side of each angle lies.

(a) 244°

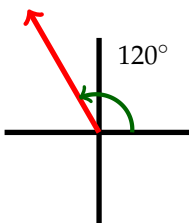
(a) _____

(b) 117°

(b) _____

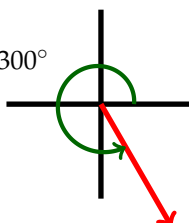
Q8 Find the reference angle for the given angle.

(a)



(A) 45°
 (B) 60°
 (C) 5°
 (D) 30°

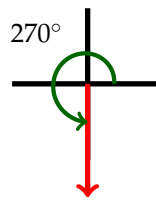
(b)



(A) 60°
 (B) 40°
 (C) 5°
 (D) 30°

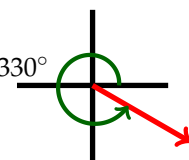
Q9 Use the unit circle to find the exact value of each trigonometric function

(a) $\cos \theta$



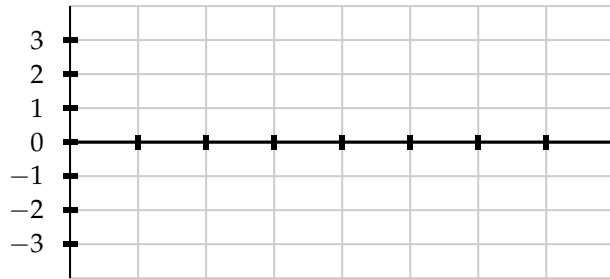
(A) Undef.
 (B) -1
 (C) $\frac{1}{2}$
 (D) 0

(b) $\cos \theta$



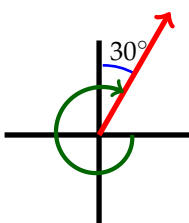
(A) $\frac{\sqrt{3}}{2}$
 (B) -1
 (C) $\frac{\sqrt{2}}{2}$
 (D) 0

Q10 Graph the function $y = \sin \theta$



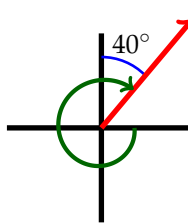
Q11 Find the measure of each of the indicated angles.

(a)



(A) -60°
 (B) -205°
 (C) -660°
 (D) -300°

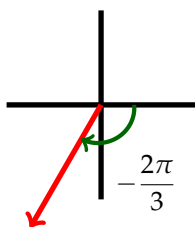
(b)



(A) -310°
 (B) -295°
 (C) 670°
 (D) -50°

Q12 Find the reference angle for the given angle.

(a)



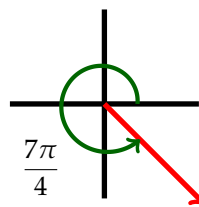
(A) $\frac{\pi}{3}$

(B) $\frac{\pi}{6}$

(C) $\frac{\pi}{9}$

(D) $\frac{7\pi}{36}$

(b)



(A) $\frac{5\pi}{36}$

(B) $\frac{\pi}{36}$

(C) $\frac{\pi}{9}$

(D) $\frac{7\pi}{18}$

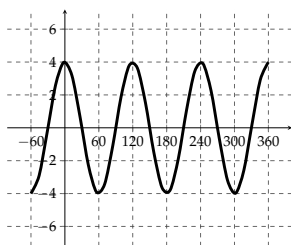
Q13 Find the exact value of each trigonometric function

(a) $\sin 150^\circ$

(b) $\cos \frac{5\pi}{2}$

Q14 Use the graph to determine the information for each problem.

(a)

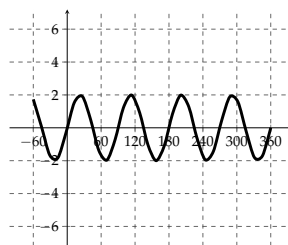


Sine or Cosine: _____

Amplitude: _____

Period: _____

(b)



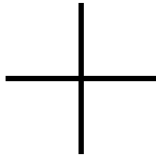
Sine or Cosine: _____

Amplitude: _____

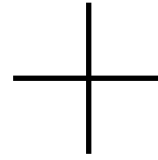
Period: _____

Q15 Sketch each of the indicated angles.

(a) $-\frac{2\pi}{3}$



(b) $\frac{5\pi}{4}$



Q16 Find the given reference angle.

(a) 550°

(b) -240°

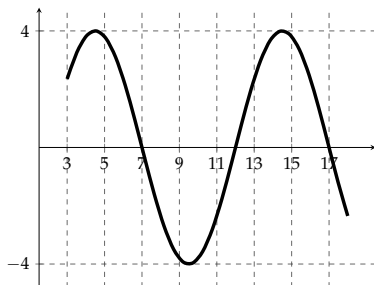
(c) $-\frac{7\pi}{3}$

Q17 Find the exact value of each given trigonometric expression.

(a) $\cos 510^\circ$

(b) $\cos \frac{19\pi}{6}$

Q18 Write a possible periodic function that matches the graph.



Q19 Sketch the graphs $y = \cos x$, $y = 4 \cos x$, and $y = \cos 4x$.

Tell how the graphs are alike and how they are different.

