

17. If $f(x) = \cos 3x$, then $f(\pi/6) =$

(A) 0

(B) $\frac{1}{2}$

(C) $\frac{\sqrt{3}}{2}$

(D) 1

18. $\sec\left(-\frac{\pi}{3}\right) =$

(A) $\frac{1}{2}$

(B) 2

(C) $-\frac{2}{\sqrt{3}}$

(D) -2

19. For which value of x is $\tan x$ *not* defined?

(A) $\pi/4$

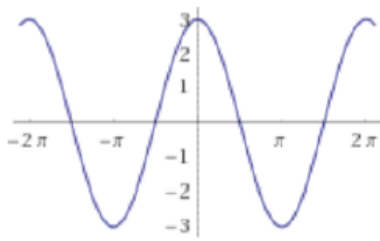
(B) π

(C) $-\pi/2$

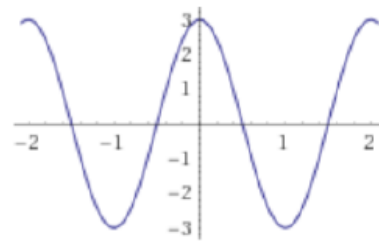
(D) $\pi/3$

20. Which of the following is a graph of $y = 3 \cos(\pi x)$?

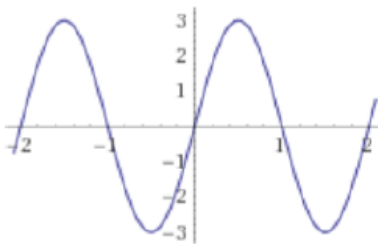
(A)



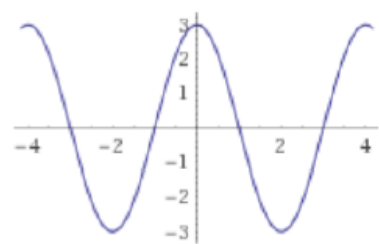
(C)



(B)



(D)



21. $\sin^2 \theta \cot \theta \sec \theta =$

- (A) $\sin \theta$
- (B) $\cos \theta$
- (C) $\sin \theta \cot \theta$
- (D) $\sin \theta \cot^2 \theta$

22. $\cos^2 \theta - 1 =$

- (A) $\sin \theta$
- (B) $\cos 2\theta$
- (C) $\sin^2 \theta$
- (D) $-\sin^2 \theta$

23. $\tan^{-1} 1 =$

- (A) $\pi/4$
- (B) $\pi/2$
- (C) 0
- (D) π