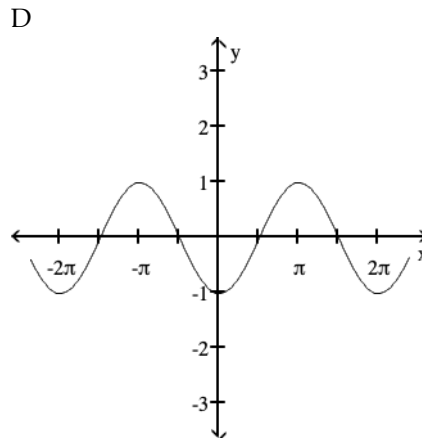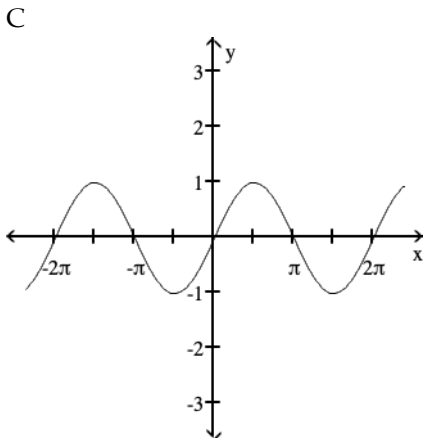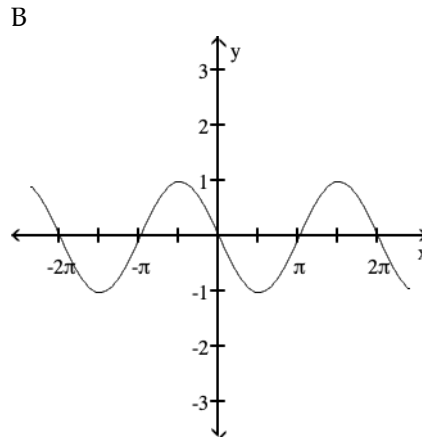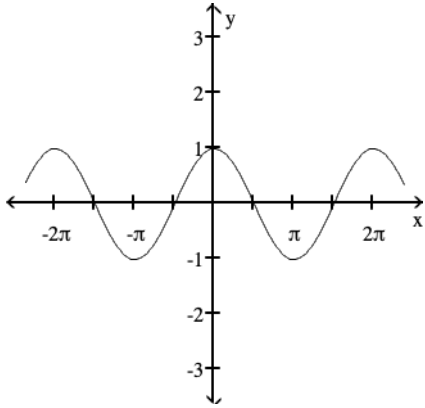# Graphs of Trigonometric Functions

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Match the given function to its graph.

1) 1) $y = \sin x$ 2) $y = \cos x$

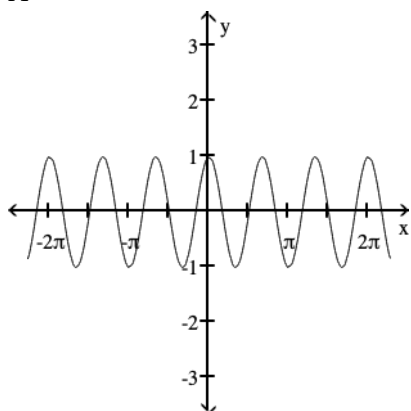   3) $y = -\sin x$ 4) $y = -\cos x$

1) _____

A

B

C

D

A) 1A, 2D, 3C, 4B

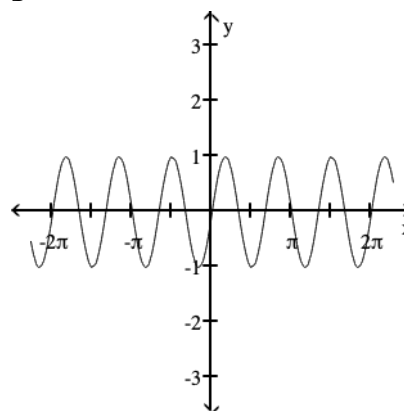C) 1B, 2D, 3C, 4A

B) 1A, 2B, 3C, 4D

D) 1C, 2A, 3B, 4D

1

2) 1) y = sin 3x   2) y = 3 cos x   2) _____
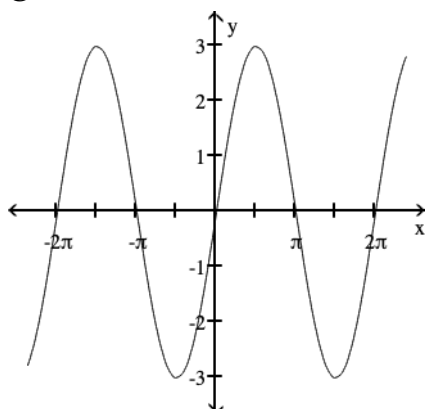   3) y = 3 sin x   4) y = cos 3x

A

B

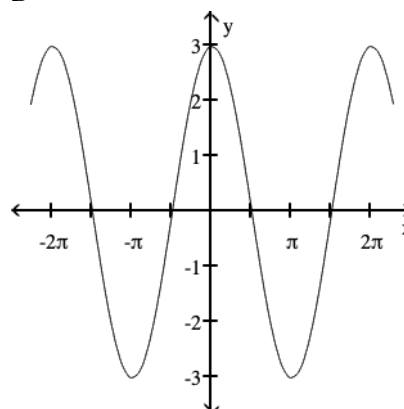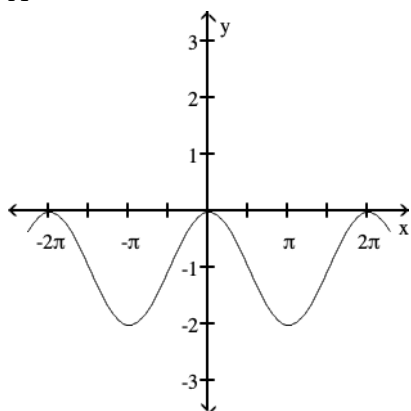
C

D

A) 1A, 2C, 3D, 4B   B) 1B, 2D, 3C, 4A
C) 1A, 2D, 3C, 4B   D) 1A, 2B, 3C, 4D
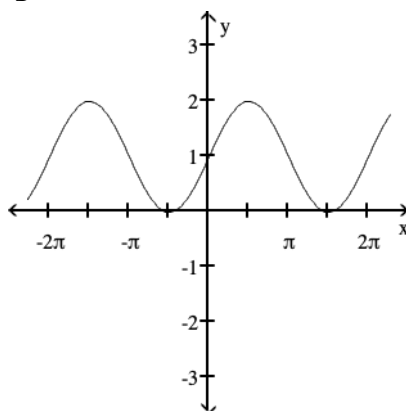
3) 1) $y = 1 + \sin x$ 2) $y = 1 + \cos x$

3) $y = -1 + \sin x$ 4) $y = -1 + \cos x$
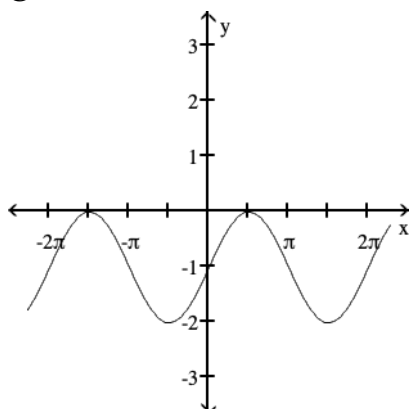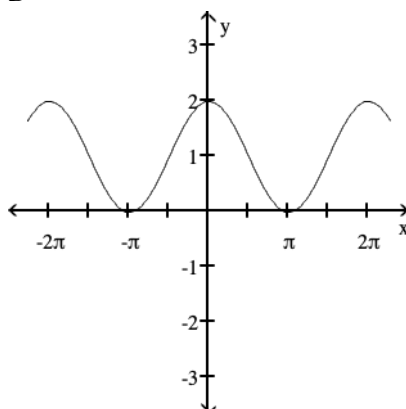
A

B

C

D

A) 1B, 2D, 3C, 4A   B) 1A, 2C, 3D, 4B

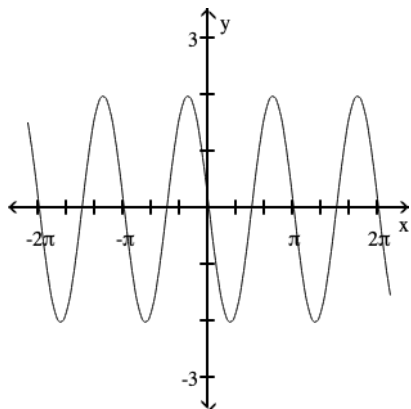C) 1A, 2D, 3C, 4B   D) 1A, 2B, 3C, 4D

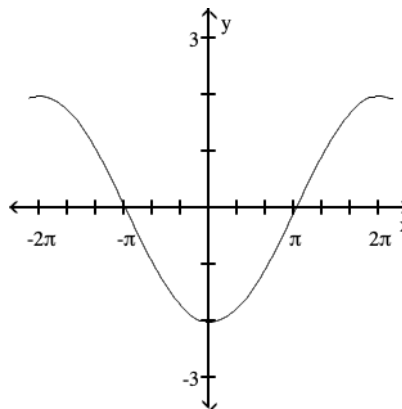4) 1) $y = -2 \sin (2x)$ 2) $y = -2 \sin \left(\frac{1}{2}x\right)$

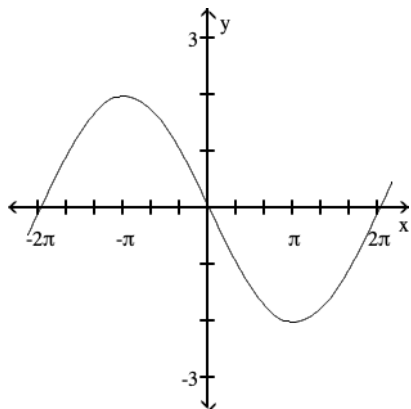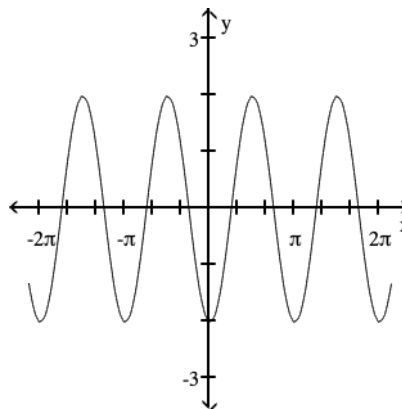3) $y = -2 \cos (2x)$ 4) $y = -2 \cos \left(\frac{1}{2}x\right)$

4) _____

A

B

C

D

A) 1D, 2B, 3A, 4C   B) 1C, 2A, 3B, 4D
C) 1C, 2A, 3D, 4B   D) 1A, 2C, 3D, 4B
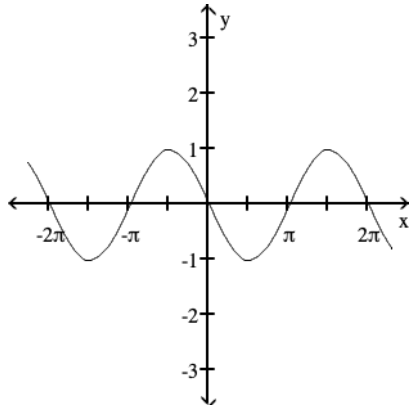
5) 1) $y = \sin (x - \frac{\pi}{2})$ 2) $y = \cos (x + \frac{\pi}{2})$
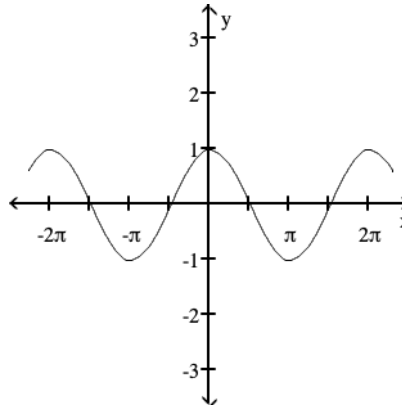
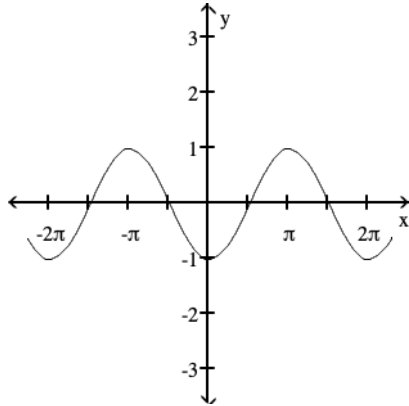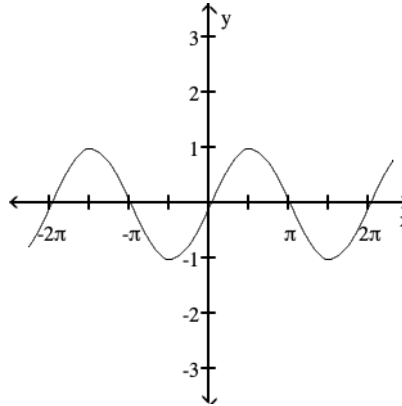3) $y = \sin (x + \frac{\pi}{2})$ 4) $y = \cos (x - \frac{\pi}{2})$

5) _____

A

B

C

D

A) 1A, 2B, 3C, 4D
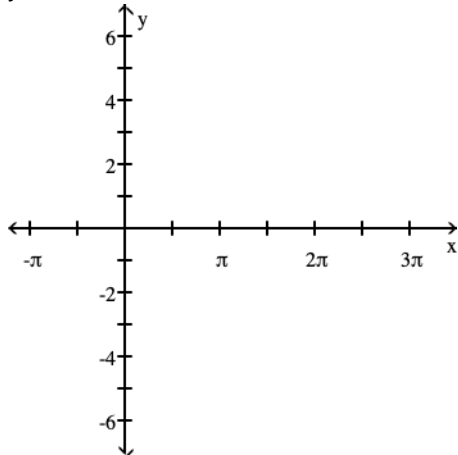C) 1A, 2D, 3C, 4B

B) 1C, 2A, 3B, 4D
D) 1B, 2D, 3C, 4A

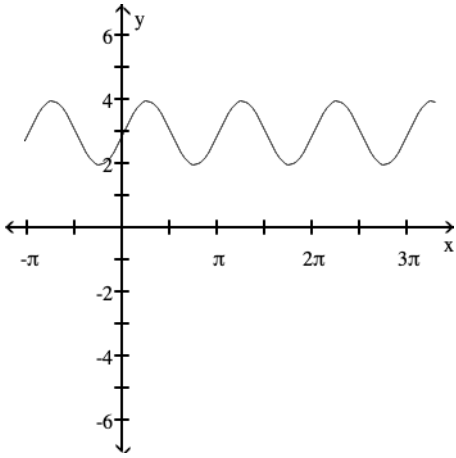**Graph the sinusoidal function.**
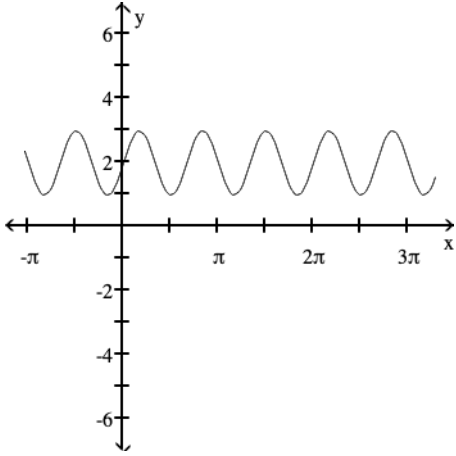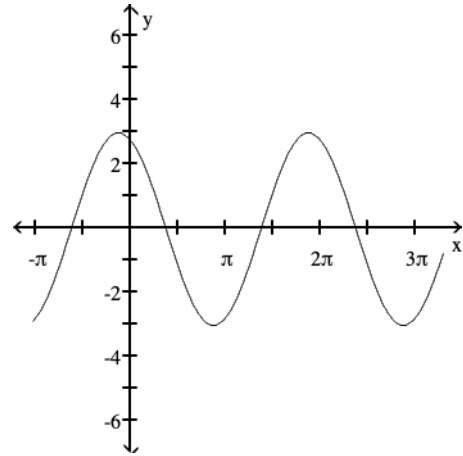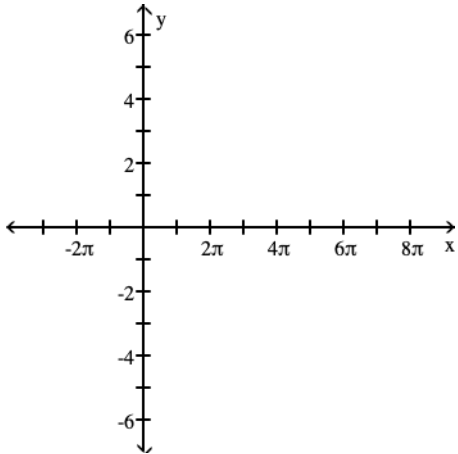
6) $y = 3 \sin (2x)$

6) _____

A)

B)

C)

D)

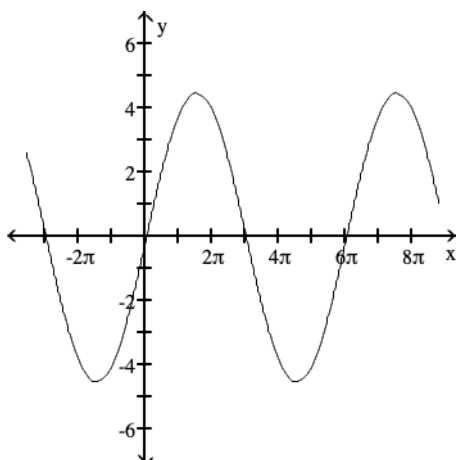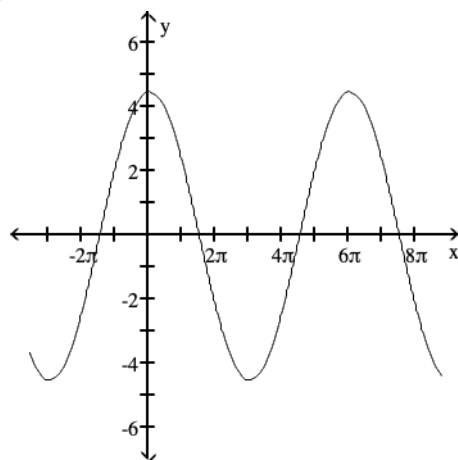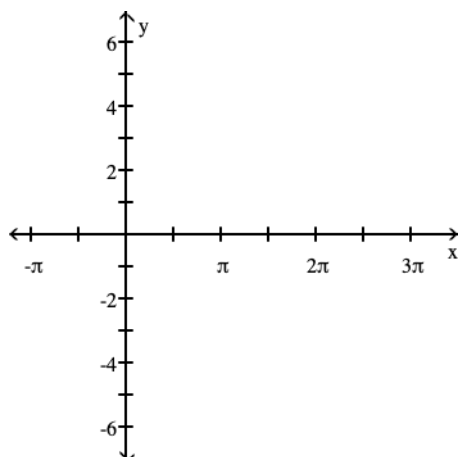7) $y = \dfrac{9}{2} \cos \left(-\dfrac{1}{3}x\right)$

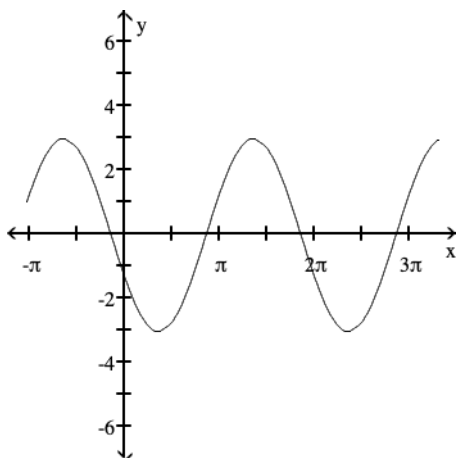7) _____

A)

B)

C)

D)
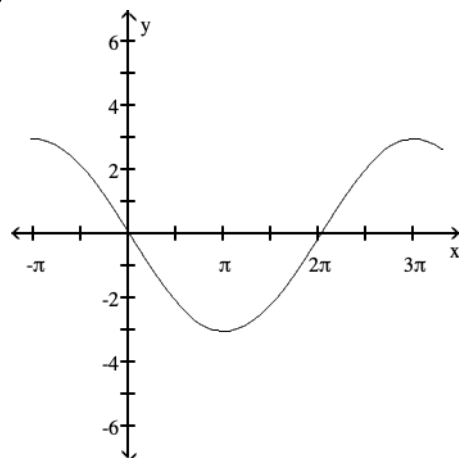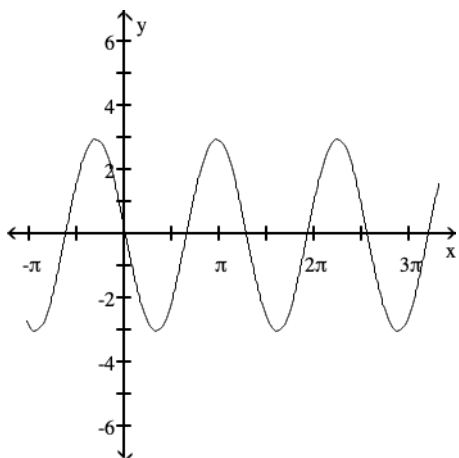

8) $y = -3 \sin\left(\frac{1}{2}x\right)$

8) _____

7

A)
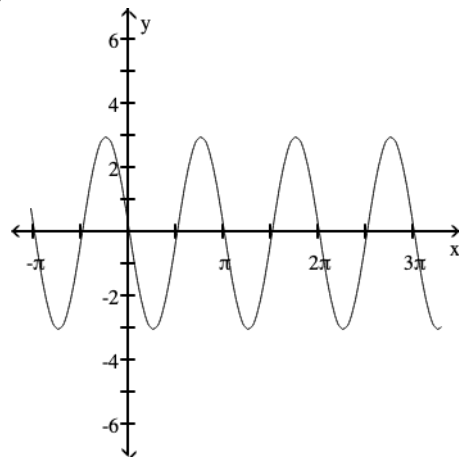

B)

C)

D)

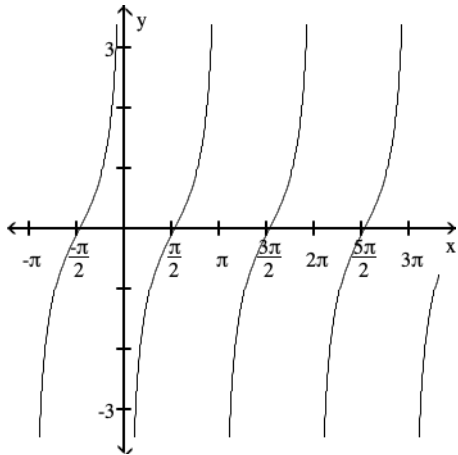**Match the function to its graph.**
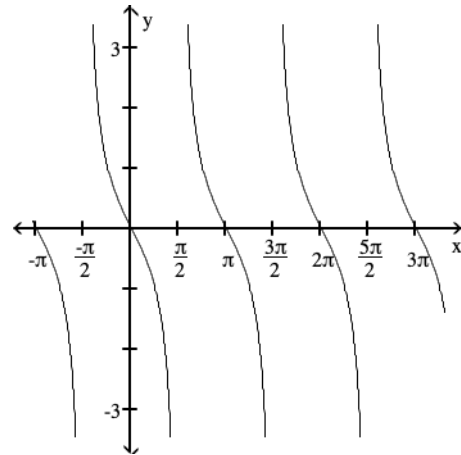
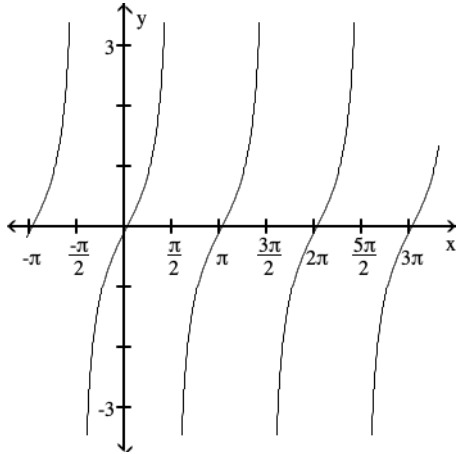9) y = –tan x   9) _____

A)
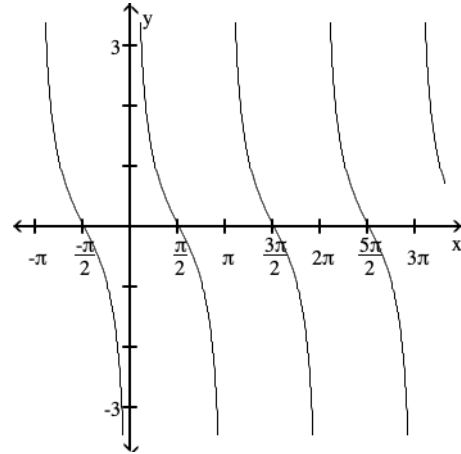

B)

C)

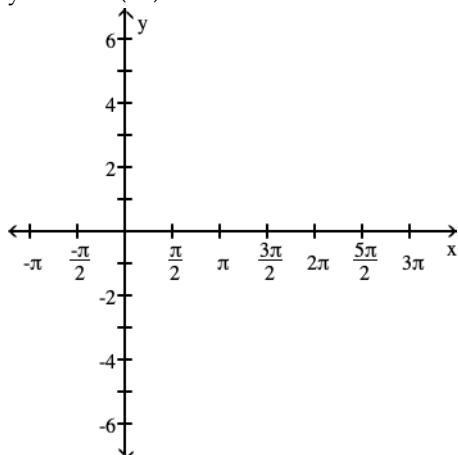D)

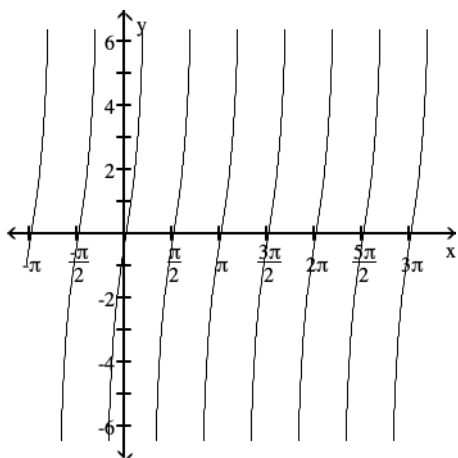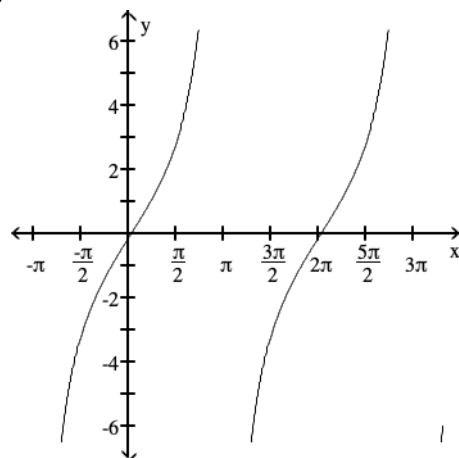**Graph the function.**

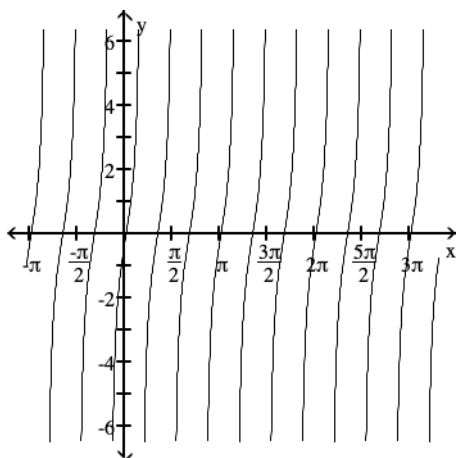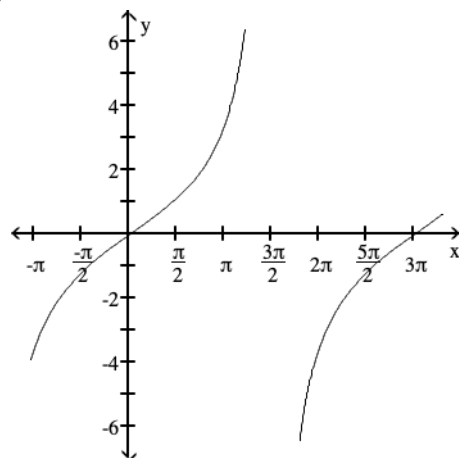10) y = 3 tan (2x)   10) _____

9

A)

B)

C)

D)

1) D
2) B
3) A
4) D
5) B
6) B
7) D
8) B
9) B
10) A