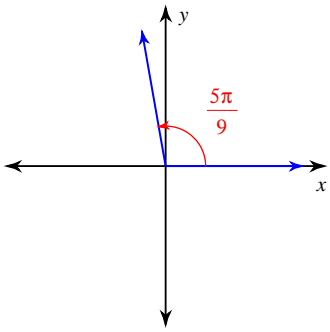
ALGEBRA Name_____

TRIGONOMETRY REVIEW

Find the reference angle.

1)



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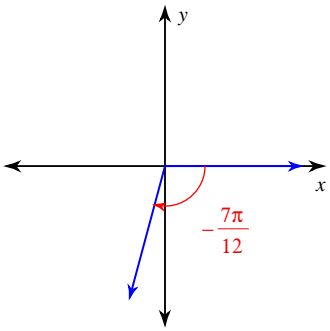

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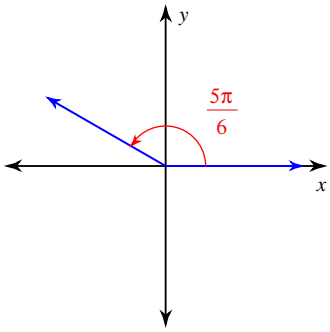

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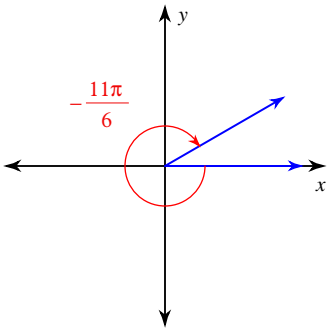

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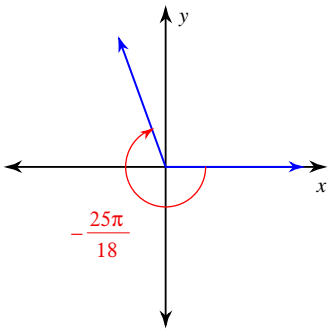

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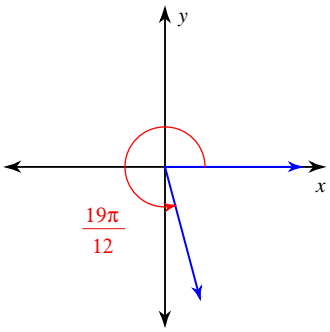

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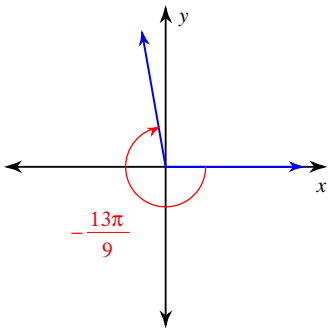

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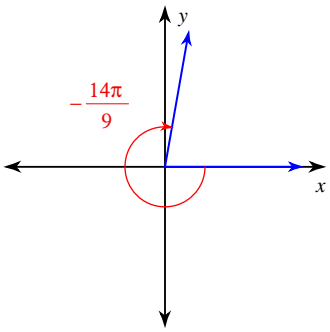

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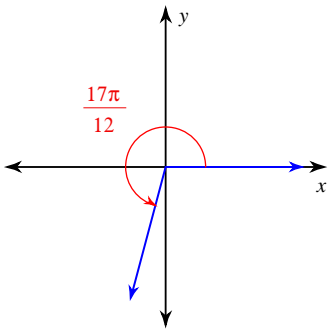

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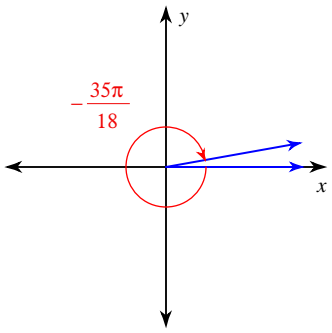

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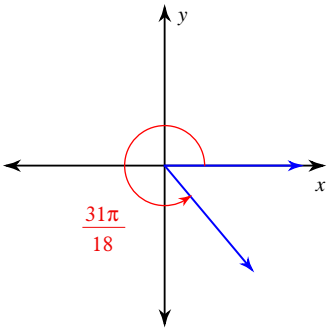

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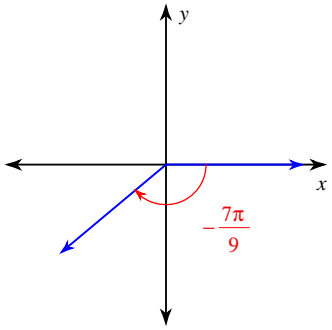

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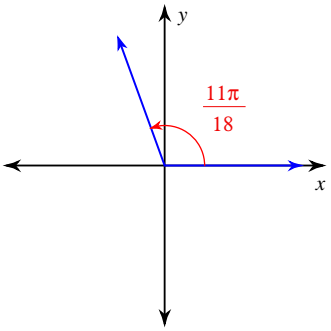

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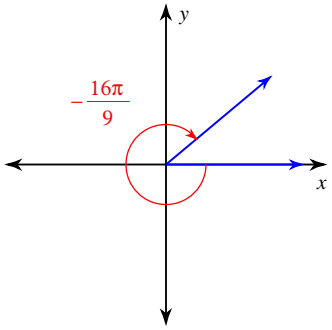

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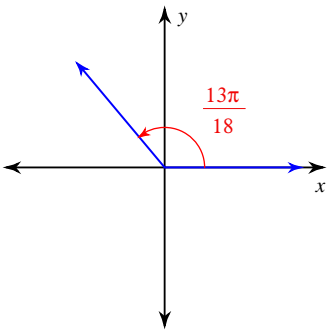

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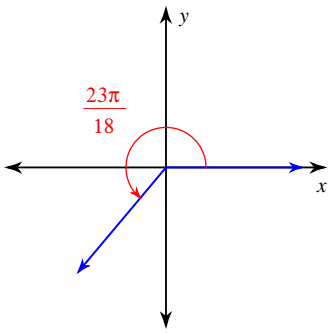

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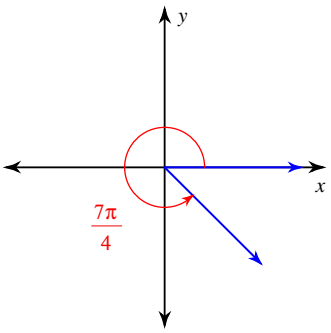

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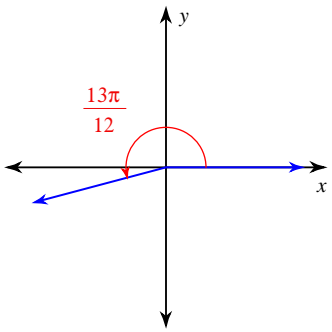

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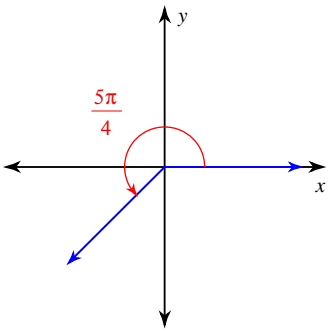

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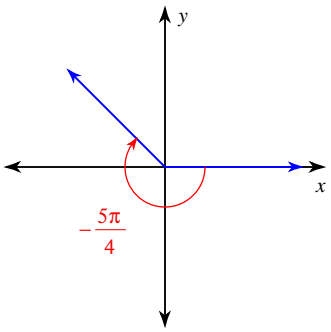

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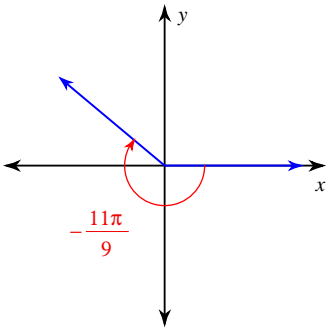

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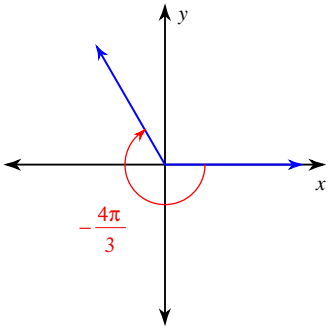

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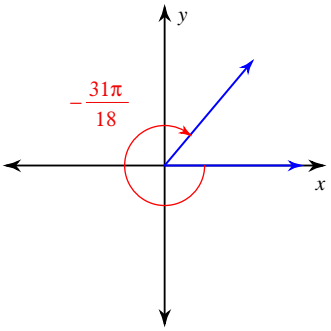

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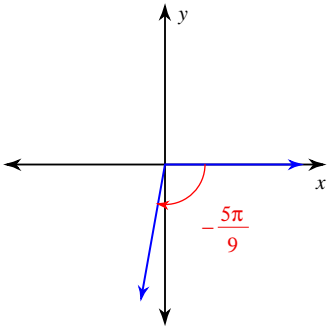

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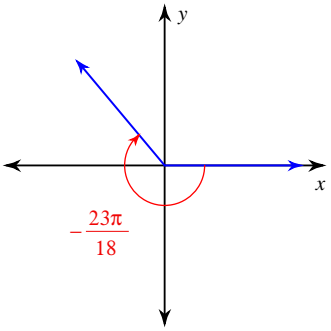


Convert each degree measure into radians.

26) 330°

27) 465°

28) 150°

29) 240°

30) -135°

31) 630°

32) -585°

33) 315°

34) -90°

35) -120°

36) -285°

37) 615°

38) 15°

39) -60°

40) -710°

41) -45°

42) 1035°

43) 495°

44) 390°

45) 410°

Convert each radian measure into degrees.

46) $-\frac{16\pi}{9}$

47) $\frac{55\pi}{36}$

48) $\frac{14\pi}{9}$

49) $-\frac{3\pi}{4}$

50) $\frac{17\pi}{6}$

51) $\frac{11\pi}{4}$

52) $-\frac{\pi}{6}$

53) $\frac{3\pi}{2}$

54) $-\frac{59\pi}{18}$

55) $-\frac{29\pi}{18}$

56) $\frac{59\pi}{36}$

57) $-\frac{5\pi}{6}$

58) $\frac{29\pi}{6}$

59) $\frac{15\pi}{4}$

60) $\frac{11\pi}{3}$

61) $\frac{13\pi}{12}$

62) $\frac{\pi}{6}$

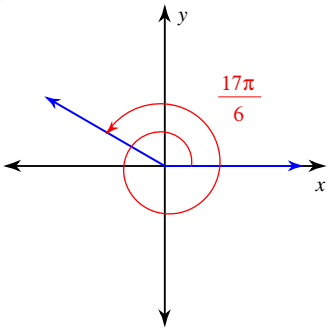
63) $\frac{4\pi}{3}$

64) $-\frac{5\pi}{4}$

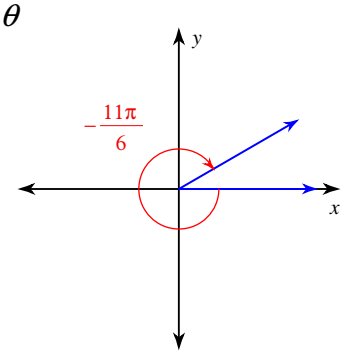
65) $-\frac{11\pi}{18}$

Find the exact value of each trigonometric function.

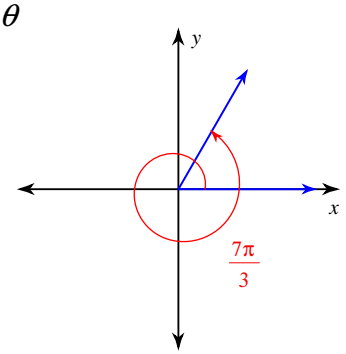
66) tan θ



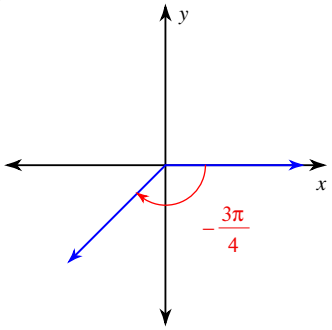
67) cot θ



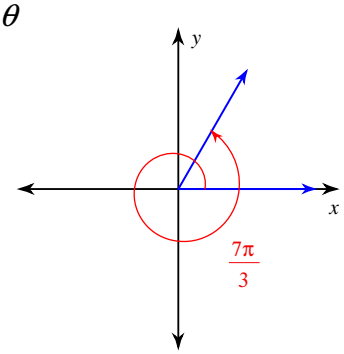
68) csc θ



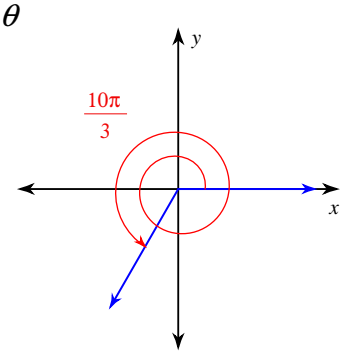
69) sec θ



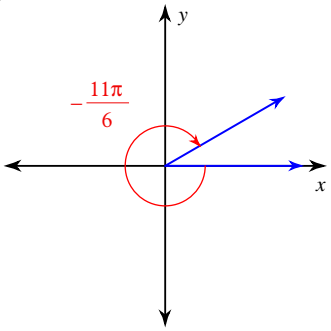
70) cos θ



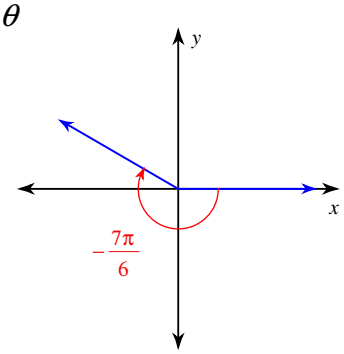
71) sin θ



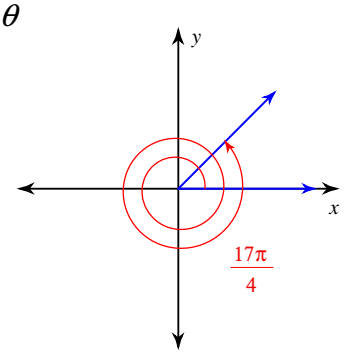
72) sin θ



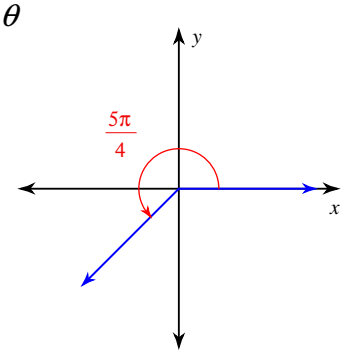
73) sin θ



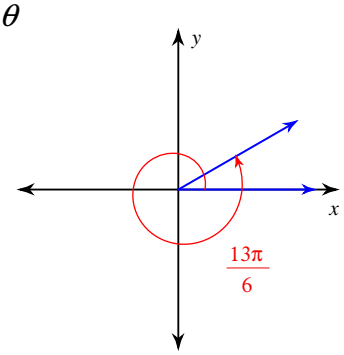
74) cos θ



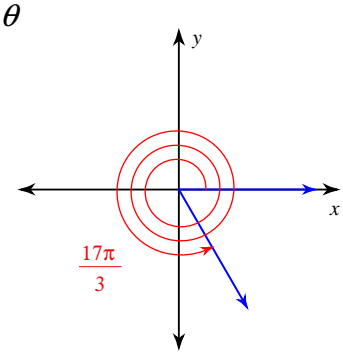
75) cot θ



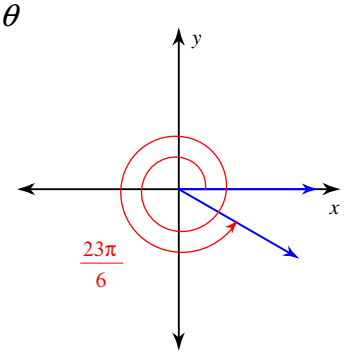
76) cos θ



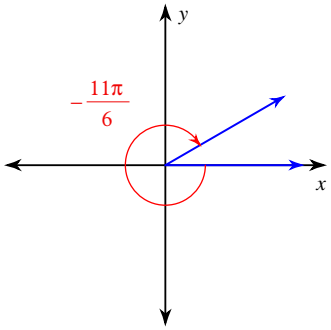
77) tan θ



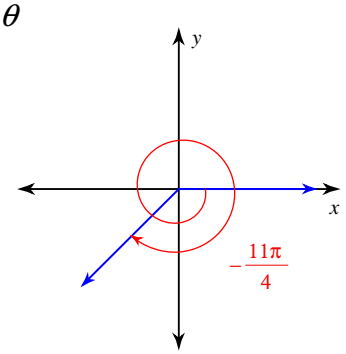
78) cot θ



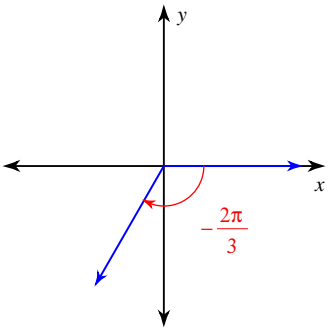
79) cos θ



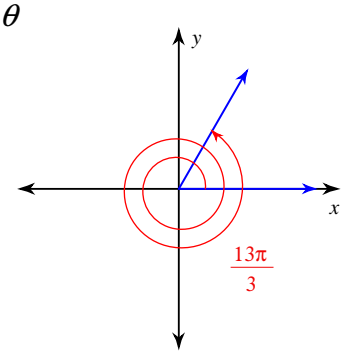
80) cot θ



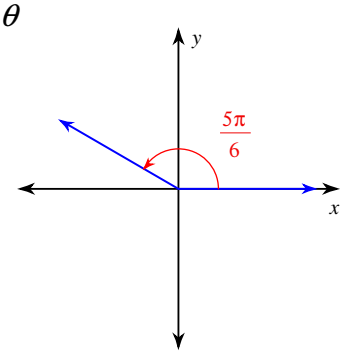
81) tan θ



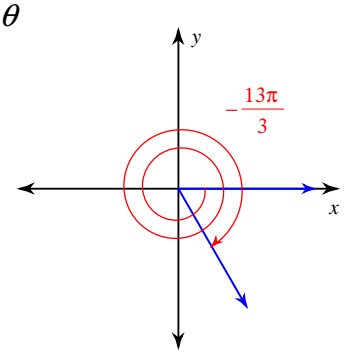
82) cot θ



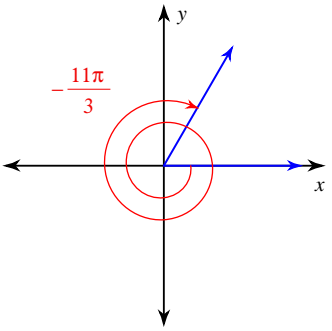
83) sec θ



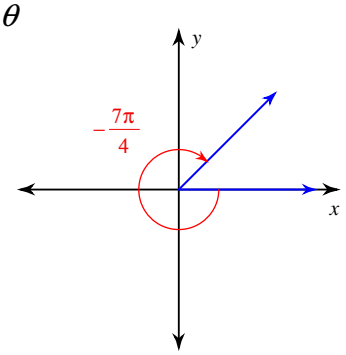
84) csc θ



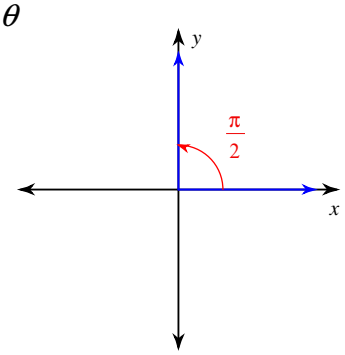
85) cot θ



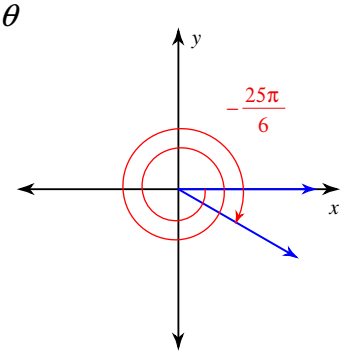
86) tan θ



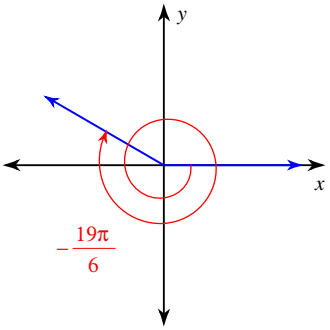
87) csc θ



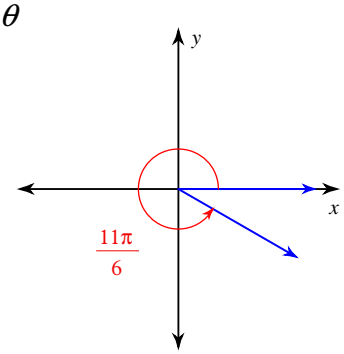
88) sec θ



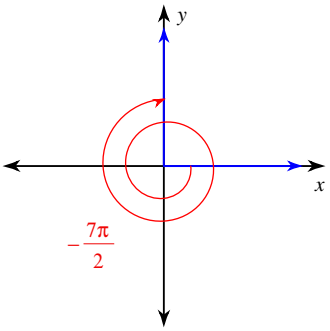
89) tan θ



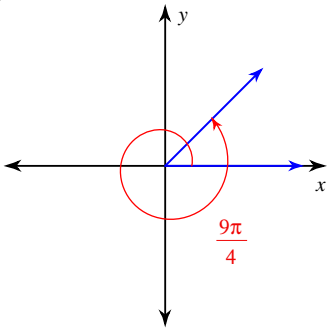
90) csc θ



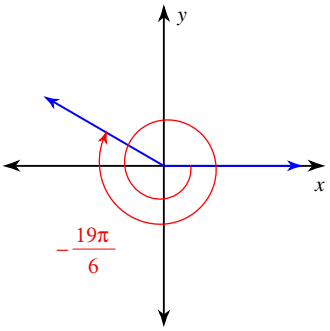
91) cot θ



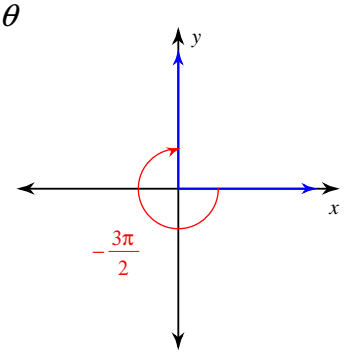
92) sin θ



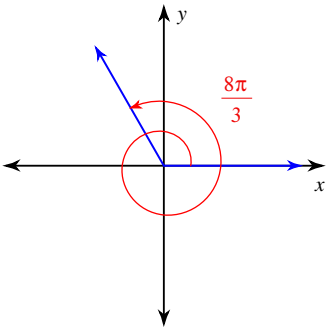
93) cot θ



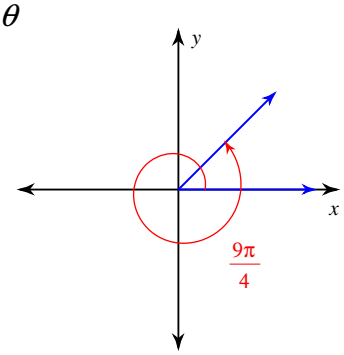
94) cos θ



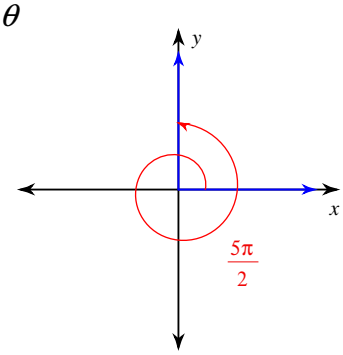
95) tan θ



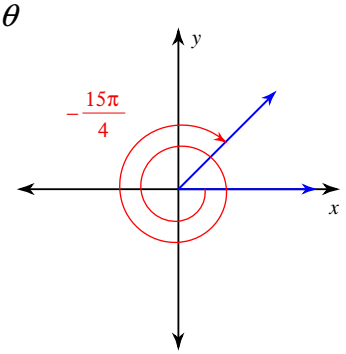
96) sec θ



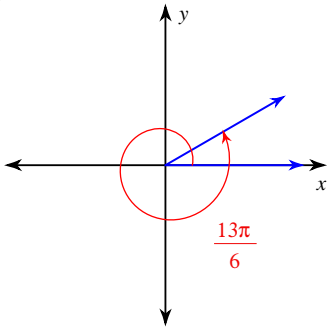
97) csc θ



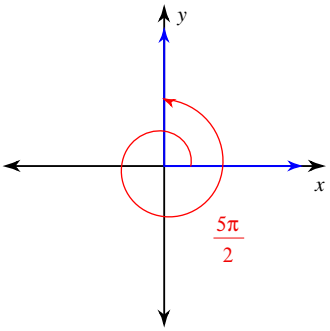
98) csc θ



99) csc θ

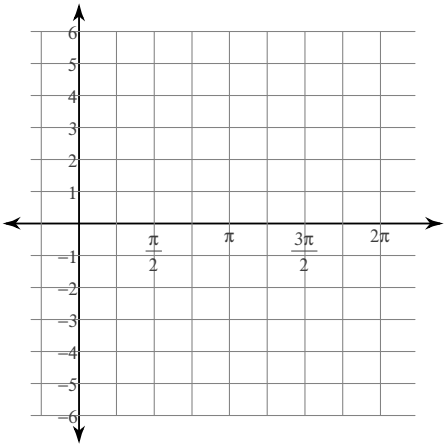


100) sin θ

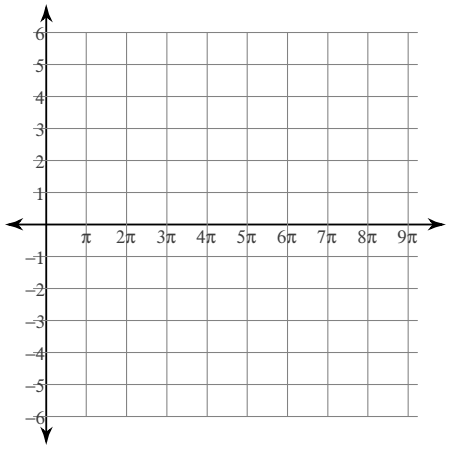


Graph each function using radians.

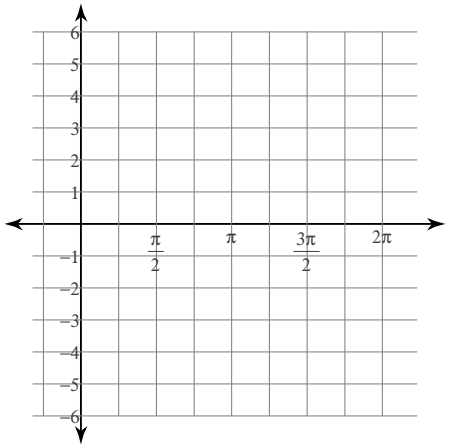
101) $y = \frac{1}{2}\sin\left(3\theta + \frac{2\pi}{3}\right) - 2$



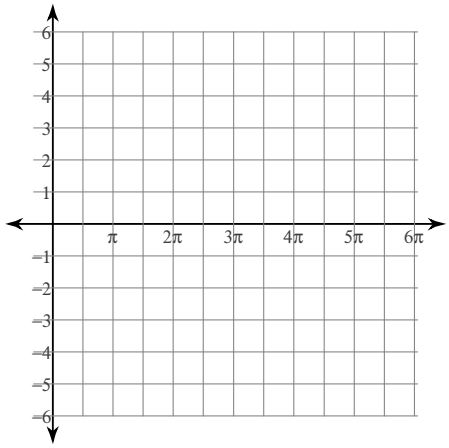
102) $y = \frac{1}{2}\sin\left(\frac{\theta}{3} + \frac{2\pi}{3}\right) - 2$



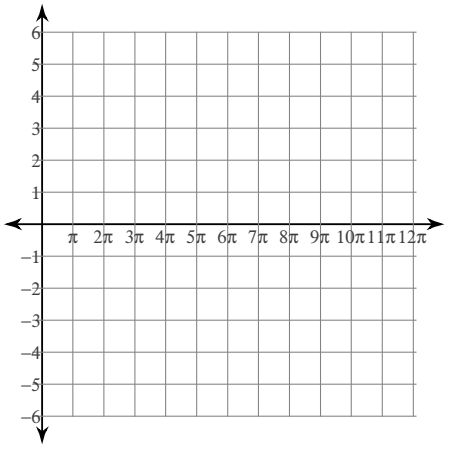
103) $y = 2\cos\left(2\theta - \frac{\pi}{4}\right) - 2$



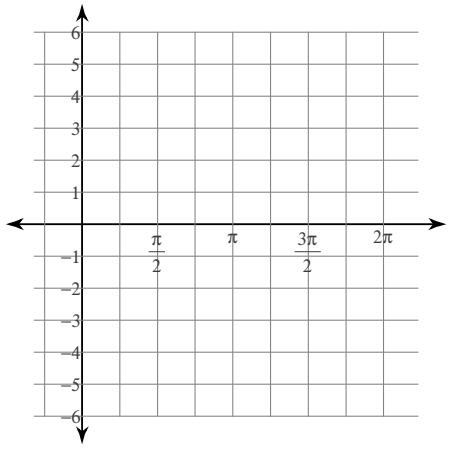
104) $y = 2\cos\left(\frac{\theta}{2} + \frac{5\pi}{3}\right) + 2$



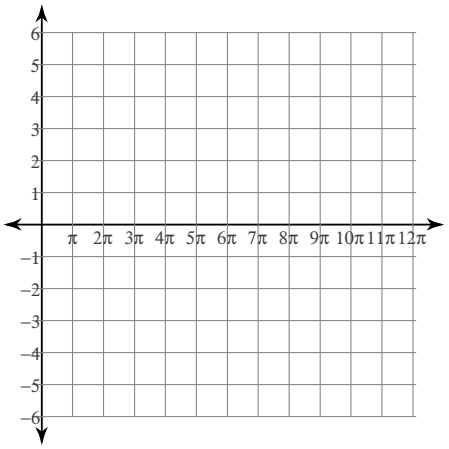
105) $y = \frac{1}{2}\sin\frac{\theta}{4}$



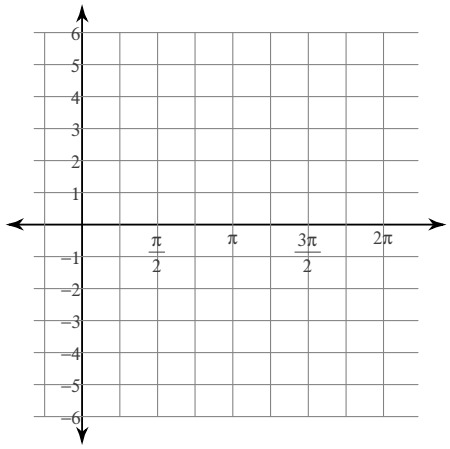
106) $y = \frac{1}{2}\sin\left(2\theta + \frac{3\pi}{4}\right) + 1$



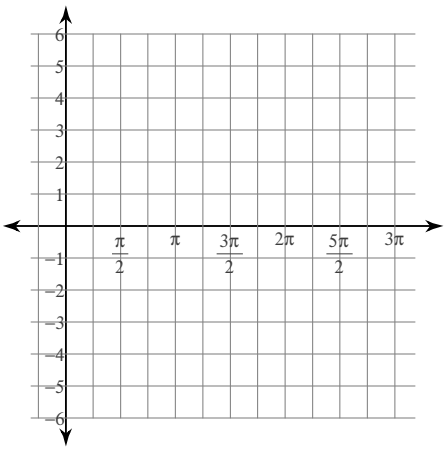
107) $y = 1 + 4\sin\frac{\theta}{4}$



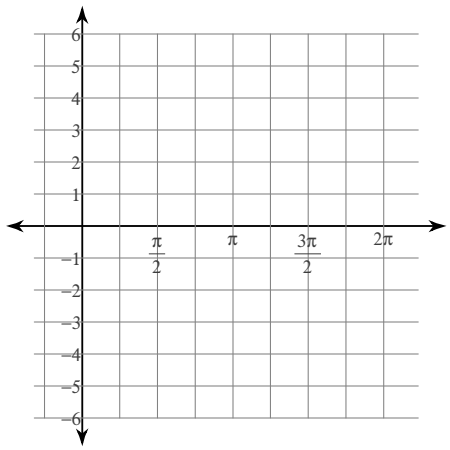
108) $y = \frac{1}{2}\sin\left(2\theta - \frac{\pi}{2}\right) - 2$



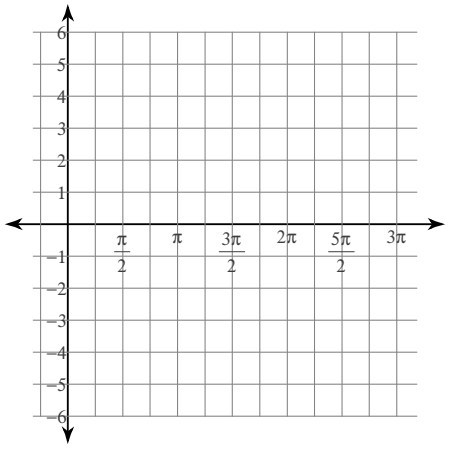
109) $y = \sin\left(\theta + \frac{\pi}{3}\right) - 2$



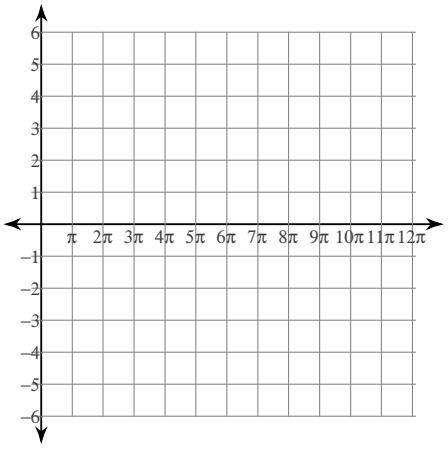
110) $y = 4\cos\left(3\theta + \frac{4\pi}{3}\right) + 2$



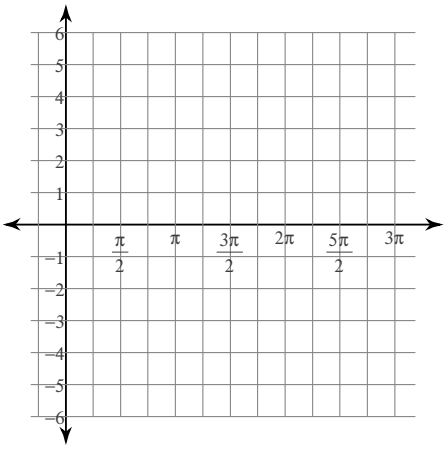
111) $y = 3\cos\left(\theta + \frac{\pi}{6}\right) + 2$



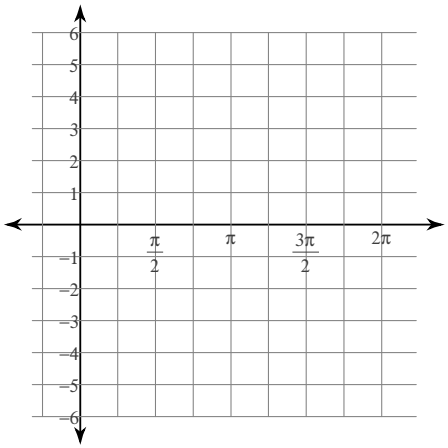
112) $y = 3\cos\left(\frac{\theta}{4} - \frac{\pi}{2}\right) - 2$



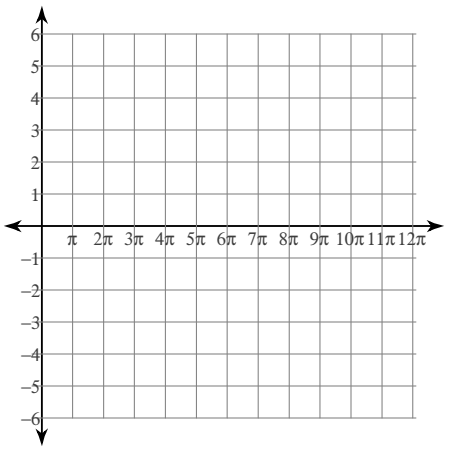
113) $y = 1 + \frac{1}{2}\sin\left(\theta + \frac{\pi}{6}\right)$



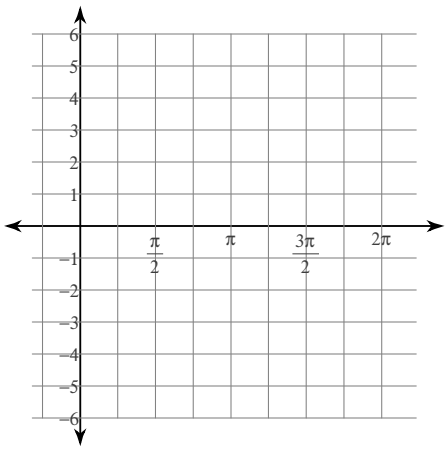
114) $y = 3\cos\left(2\theta - \frac{7\pi}{6}\right) + 1$



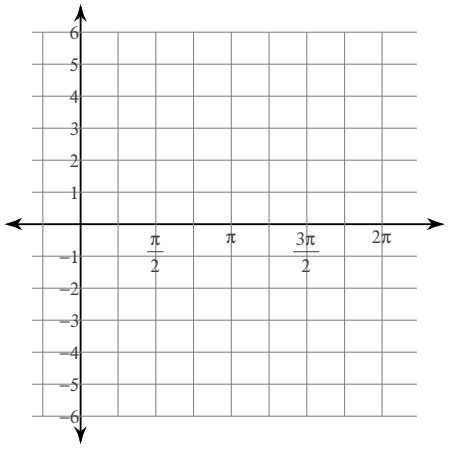
115) $y = -1 + \frac{1}{2}\cos\left(\frac{\theta}{4} - \frac{\pi}{3}\right)$



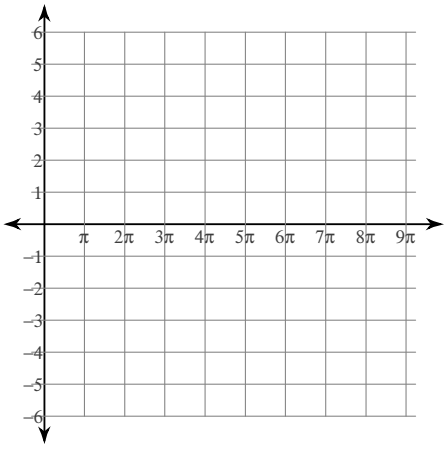
116) $y = 3\cos\left(4\theta + \frac{7\pi}{4}\right) + 2$



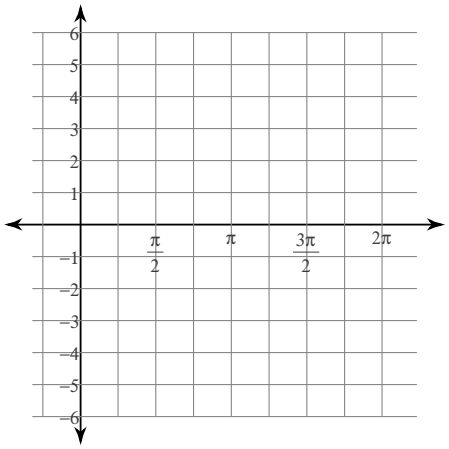
117) $y = -2 + \frac{1}{2}\cos\left(2\theta - \frac{\pi}{2}\right)$



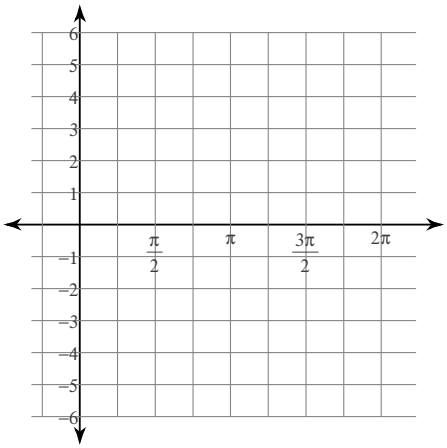
118) $y = 3\cos\left(\frac{\theta}{3} - \frac{3\pi}{4}\right) + 2$



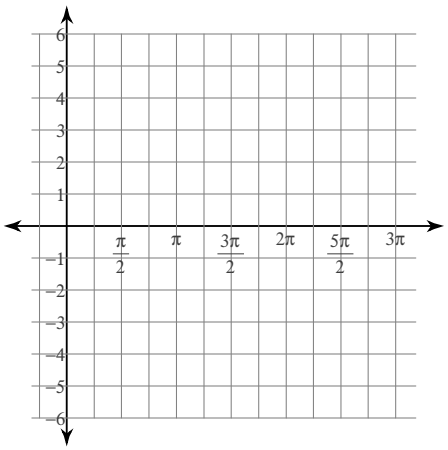
119) $y = -1 + 2\cos\left(3\theta + \frac{\pi}{2}\right)$



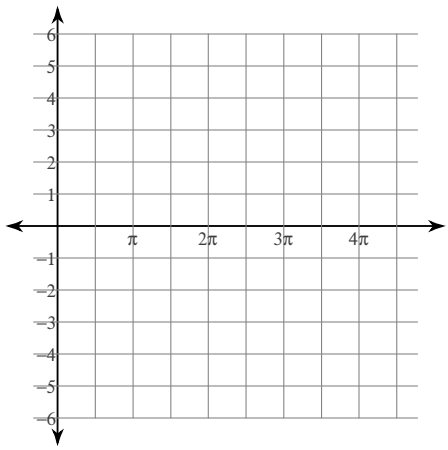
120) $y = \frac{1}{2}\cos 4\theta - 2$



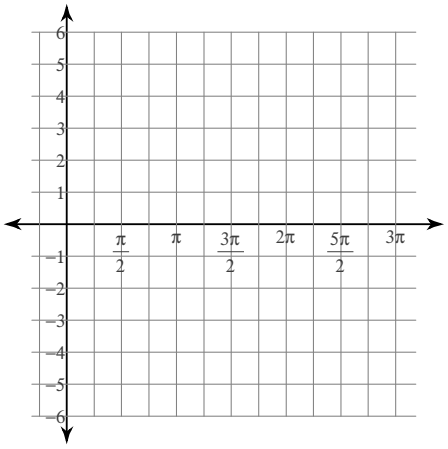
121) $y = \frac{1}{2}\tan\left(\frac{\theta}{2} - \frac{\pi}{3}\right) + 1$



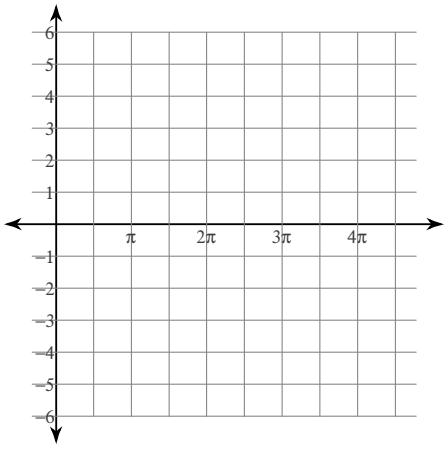
122) $y = -1 + 3\tan\left(\frac{\theta}{3} - \frac{\pi}{4}\right)$



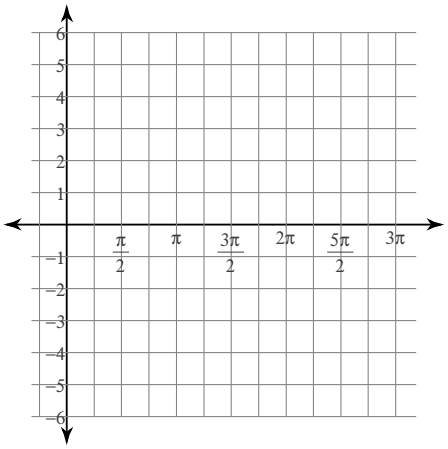
123) $y = 1 + 4\tan\left(\frac{\theta}{2} + \frac{5\pi}{6}\right)$



124) $y = 2 + \frac{1}{2}\tan\left(\frac{\theta}{3} - \frac{\pi}{4}\right)$



125) $y = 4\tan\left(\frac{\theta}{2} - \frac{2\pi}{3}\right) + 1$



Answers to TRIGONOMETRY REVIEW

1) $\frac{4\pi}{9}$
2) $\frac{5\pi}{12}$
3) $\frac{\pi}{6}$
4) $\frac{\pi}{6}$
5) $\frac{7\pi}{18}$
6) $\frac{5\pi}{12}$
7) $\frac{4\pi}{9}$
8) $\frac{4\pi}{9}$
9) $\frac{5\pi}{12}$
10) $\frac{\pi}{18}$
11) $\frac{5\pi}{18}$
12) $\frac{2\pi}{9}$
13) $\frac{7\pi}{18}$
14) $\frac{2\pi}{9}$
15) $\frac{5\pi}{18}$
16) $\frac{5\pi}{18}$
17) $\frac{\pi}{4}$
18) $\frac{\pi}{12}$
19) $\frac{\pi}{4}$
20) $\frac{\pi}{4}$
21) $\frac{2\pi}{9}$
22) $\frac{\pi}{3}$
23) $\frac{5\pi}{18}$
24) $\frac{4\pi}{9}$
25) $\frac{5\pi}{18}$
26) $\frac{11\pi}{6}$
27) $\frac{31\pi}{12}$
28) $\frac{5\pi}{6}$
29) $\frac{4\pi}{3}$
30) $-\frac{3\pi}{4}$
31) $\frac{7\pi}{2}$
32) $-\frac{13\pi}{4}$
33) $\frac{7\pi}{4}$
34) $-\frac{\pi}{2}$
35) $-\frac{2\pi}{3}$
36) $-\frac{19\pi}{12}$
37) $\frac{41\pi}{12}$
38) $\frac{\pi}{12}$
39) $-\frac{\pi}{3}$
40) $-\frac{71\pi}{18}$
41) $-\frac{\pi}{4}$
42) $\frac{23\pi}{4}$
43) $\frac{11\pi}{4}$
44) $\frac{13\pi}{6}$
45) $\frac{41\pi}{18}$
46) -320°
47) 275°
48) 280°
49) -135°
50) 510°
51) 495°
52) -30°
53) 270°
54) -590°
55) -290°
56) 295°
57) -150°
58) 870°
59) 675°
60) 660°
61) 195°
62) 30°
63) 240°
64) -225°
65) -110°
66) $-\frac{\sqrt{3}}{3}$
67) $\sqrt{3}$
68) $\frac{2\sqrt{3}}{3}$
69) $-\sqrt{2}$
70) $\frac{1}{2}$
71) $-\frac{\sqrt{3}}{2}$
72) $\frac{1}{2}$
73) $\frac{1}{2}$
74) $\frac{\sqrt{2}}{2}$
75) 1
76) $\frac{\sqrt{3}}{2}$
77) $-\sqrt{3}$
78) $-\sqrt{3}$
79) $\frac{\sqrt{3}}{2}$
80) 1
81) $\sqrt{3}$
82) $\frac{\sqrt{3}}{3}$
83) $-\frac{2\sqrt{3}}{3}$
84) $-\frac{2\sqrt{3}}{3}$
85) $\frac{\sqrt{3}}{3}$
86) 1
87) 1
88) $\frac{2\sqrt{3}}{3}$
89) $-\frac{\sqrt{3}}{3}$
90) -2
91) 0
92) $\frac{\sqrt{2}}{2}$

93) $-\sqrt{3}$

94) 0

95) $-\sqrt{3}$

96) $\sqrt{2}$

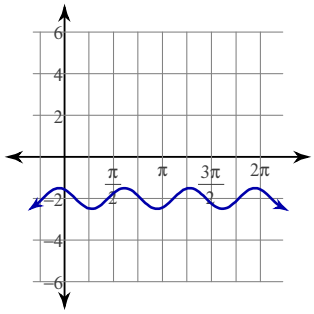
97) 1

98) $\sqrt{2}$

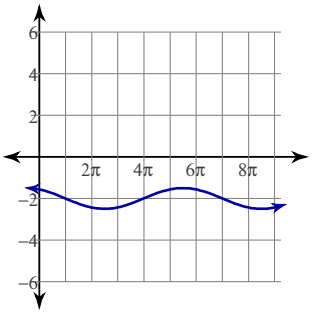
99) 2

100) 1

101)



102)



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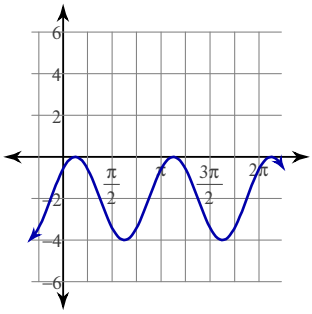

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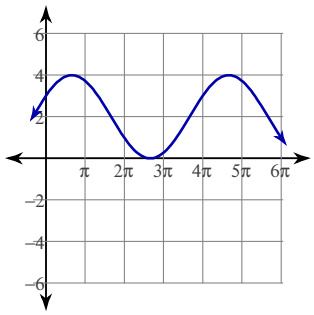

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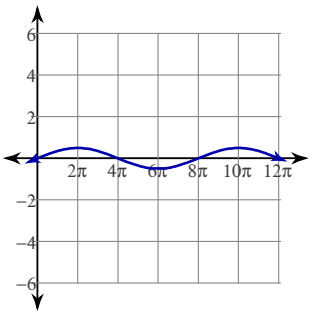

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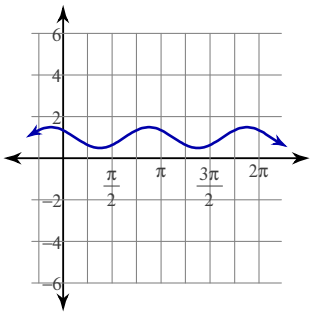
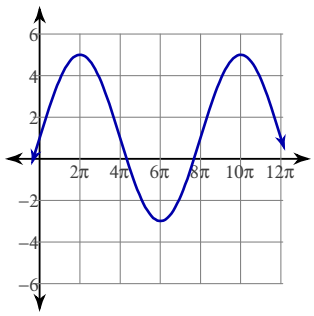
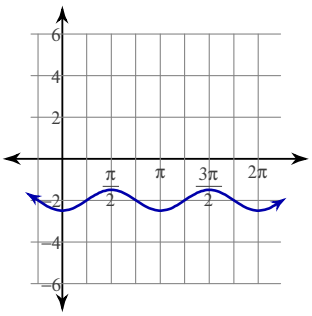


107)



108)



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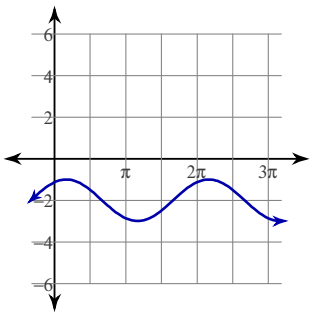

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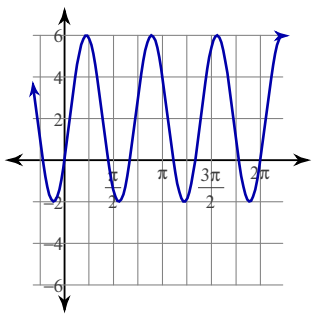

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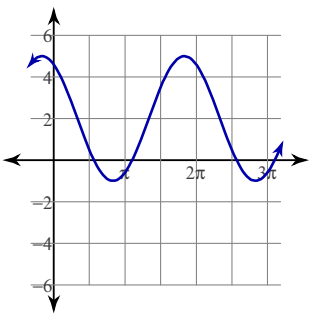

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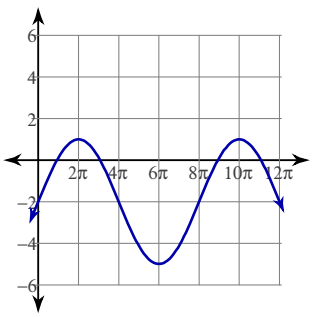

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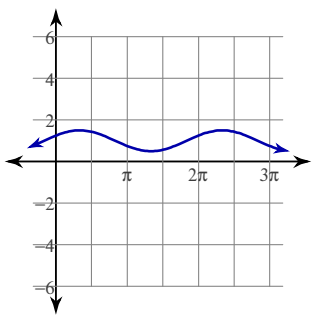

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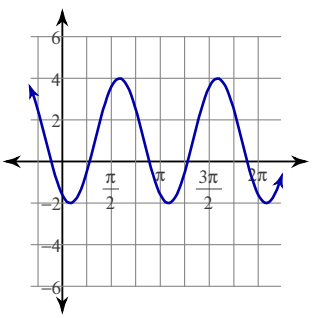

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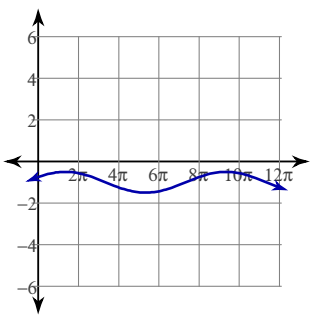

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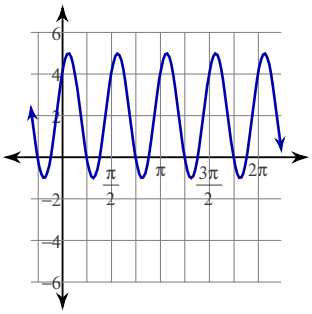

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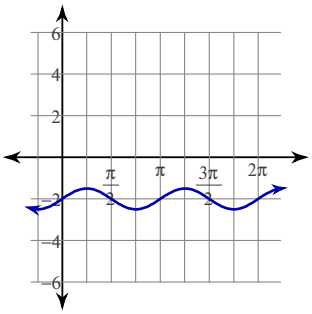

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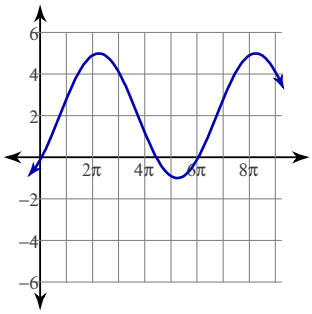

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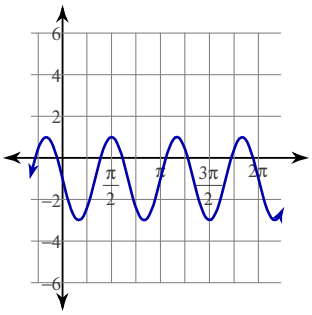

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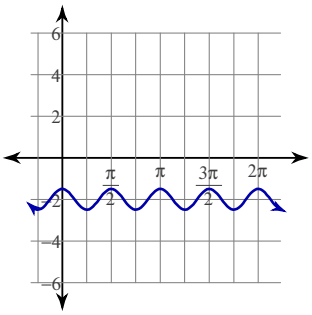

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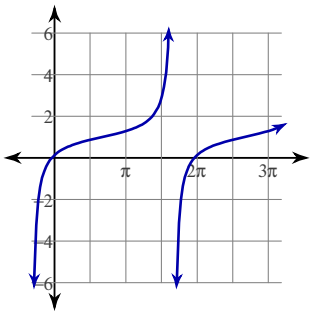

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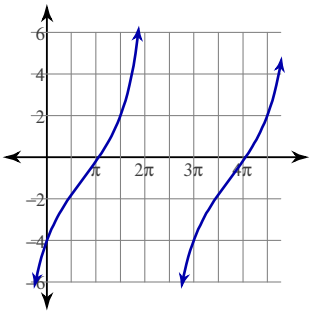

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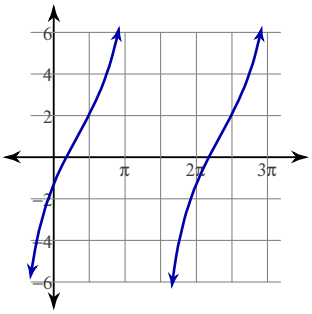

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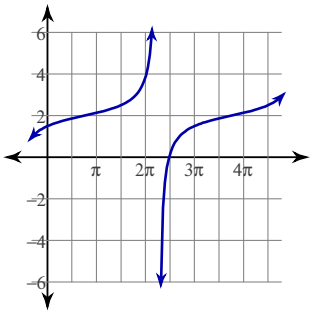
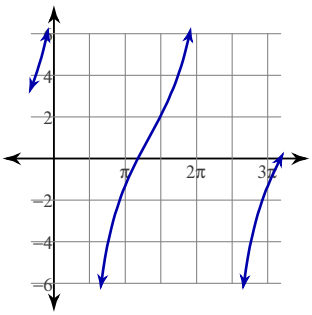
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