

1. -/4 points

SPreCalc6 5.3.038.

Find the amplitude, period, and phase shift of the function.

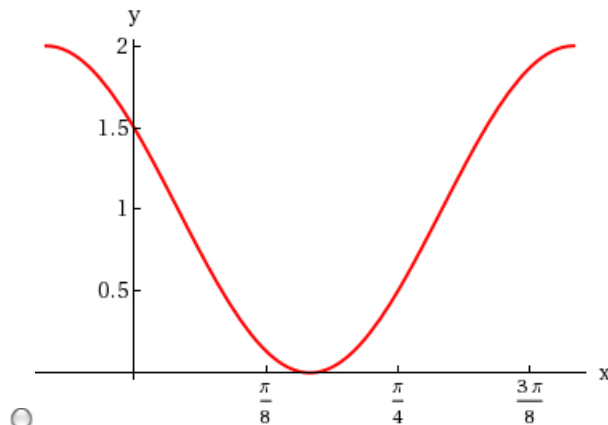
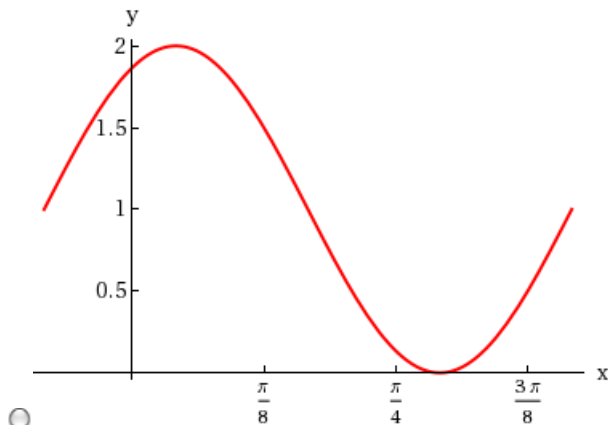
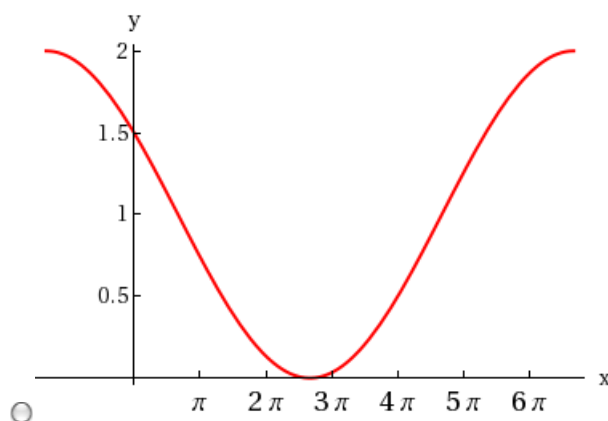
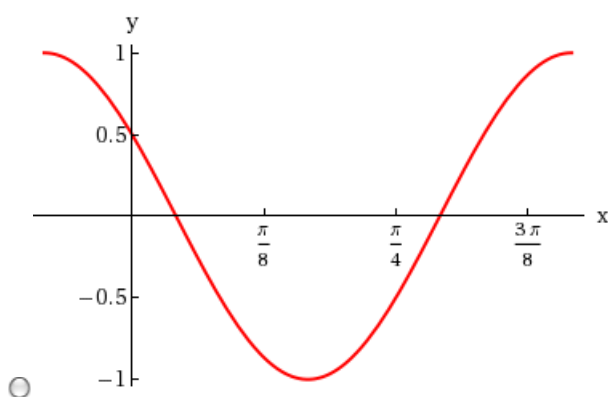
$$y = 1 + \cos\left(4x + \frac{\pi}{3}\right)$$

amplitude

period

phase shift

Graph one complete period.



2. -/4 points

SPreCalc6 5.3.036.

Find the amplitude, period, and phase shift of the function.

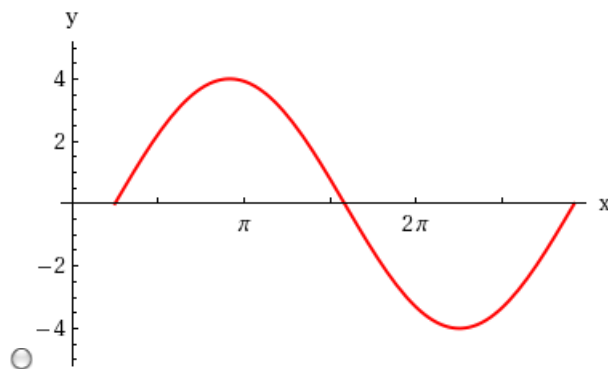
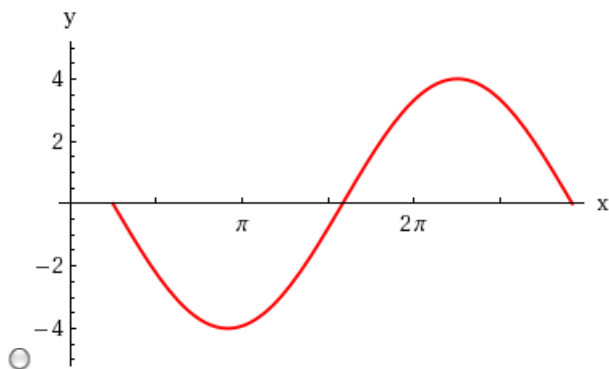
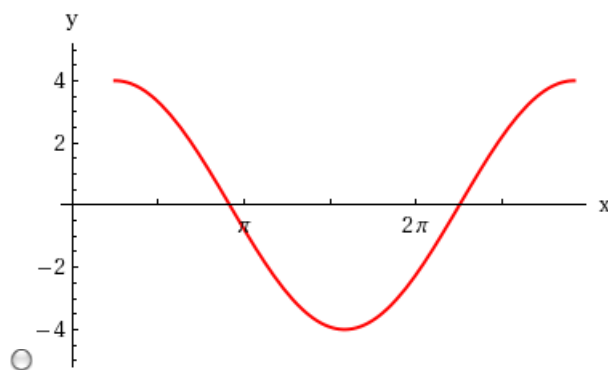
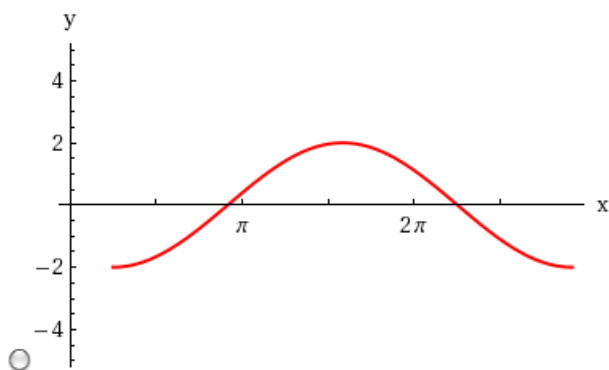
$$y = 4 \sin\left(\frac{3}{4}x - \frac{3\pi}{16}\right)$$

amplitude

period

phase shift

Graph one complete period.



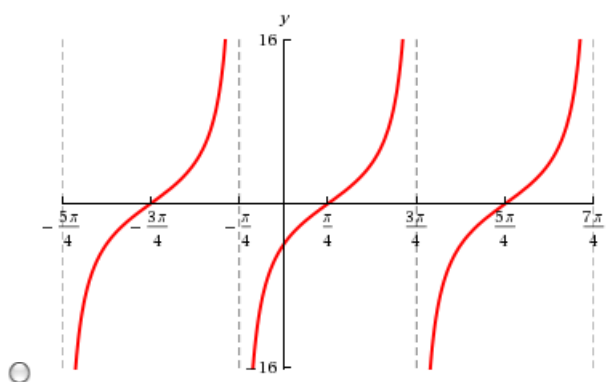
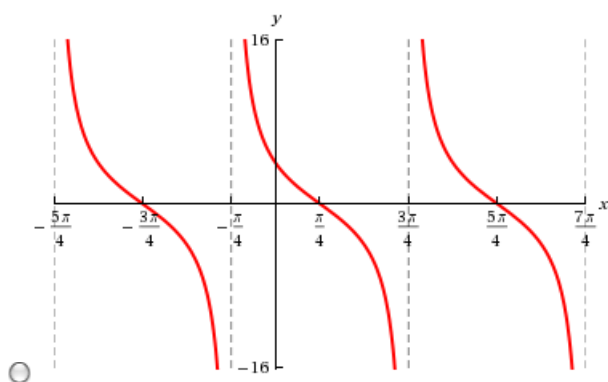
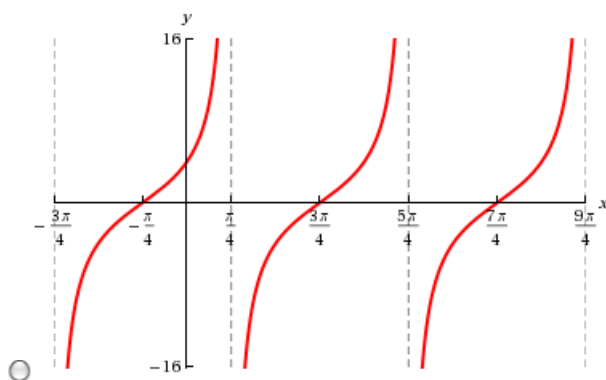
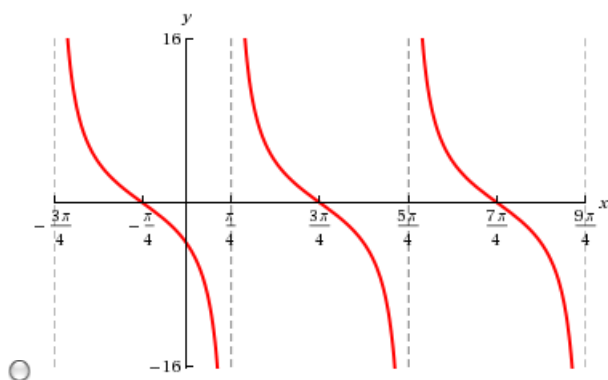
3. -/2 points

SPreCalc6 5.4.020.

Find the period and graph the function.

$$y = 4 \tan\left(x - \frac{\pi}{4}\right)$$

period = rad



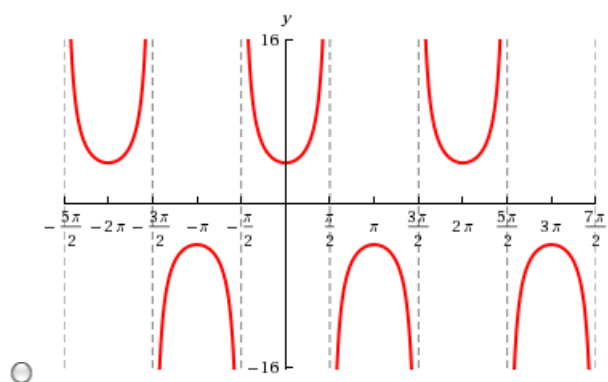
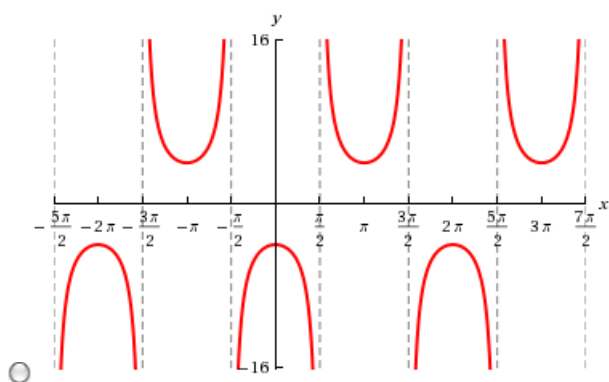
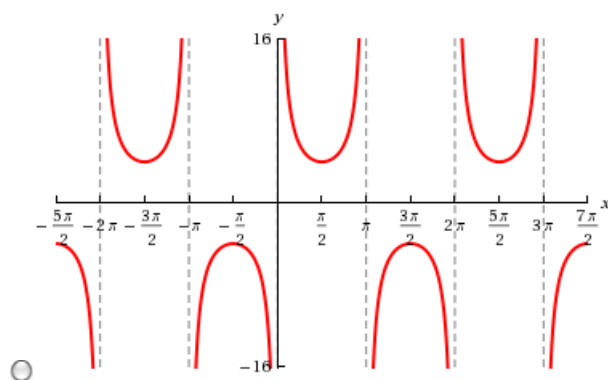
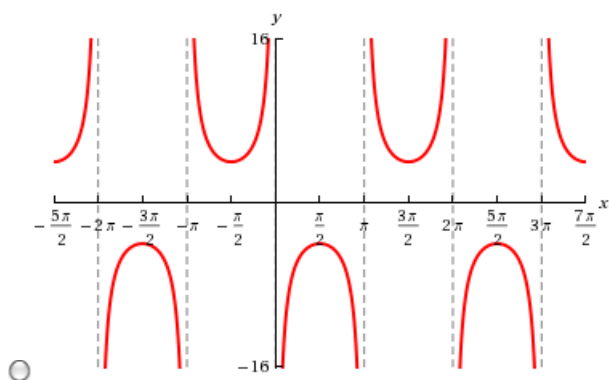
4. -/2 points

SPreCalc6 5.4.026.

Find the period and graph the function.

$$y = 4 \csc\left(x + \frac{\pi}{2}\right)$$

period = rad



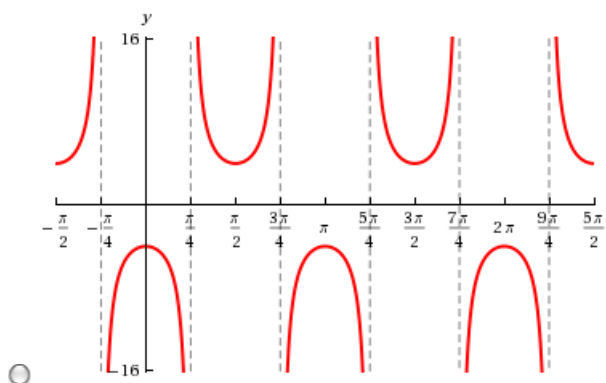
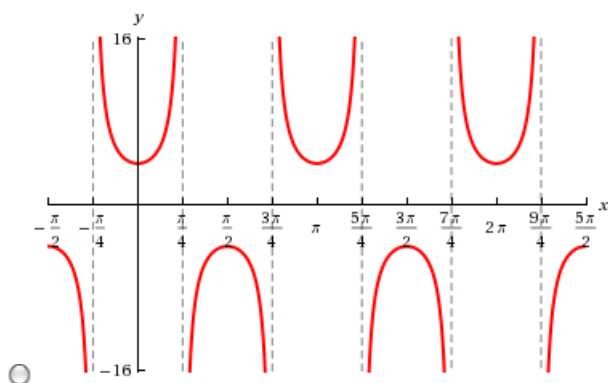
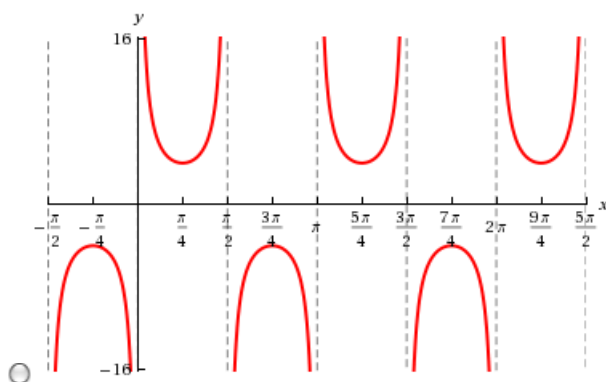
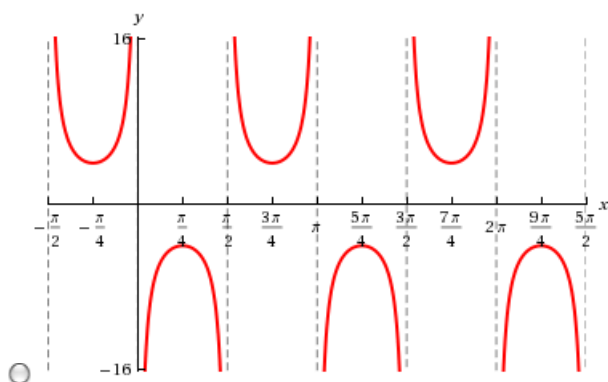
5. -/2 points

SPreCalc6 5.4.042.

Find the period and graph the function.

$$y = 4 \sec 2\left(x - \frac{\pi}{2}\right)$$

period = rad



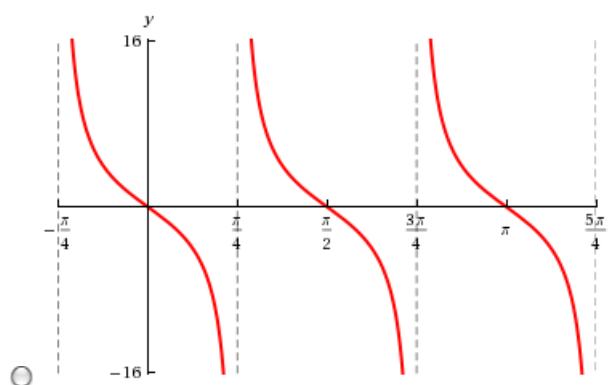
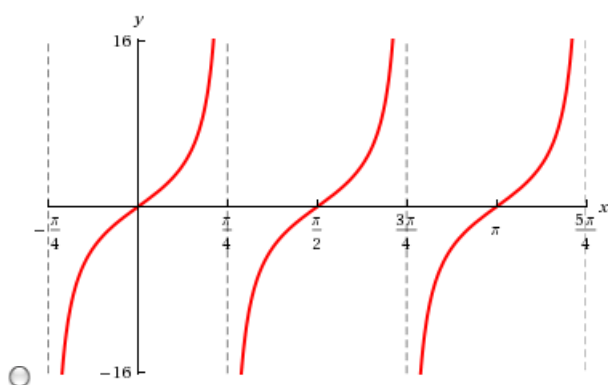
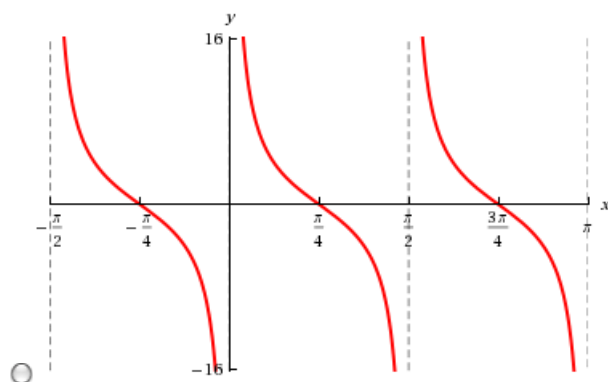
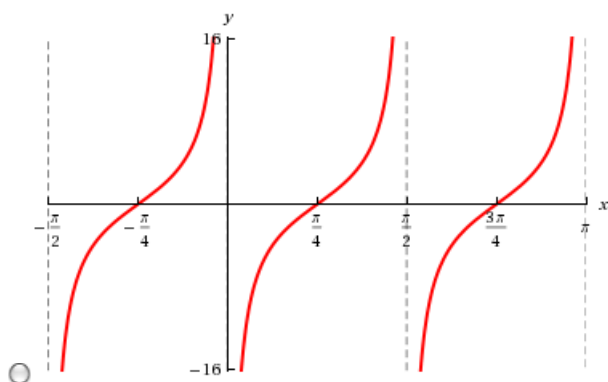
6. -/2 points

SPreCalc6 5.4.043.

Find the period and graph the function.

$$y = 4 \cot\left(2x - \frac{\pi}{2}\right)$$

period = rad



7. -/3 points

SPreCalc6 5.5.006.

Find the exact value of each expression, if it is defined. (If an answer is undefined, enter UNDEFINED.)

(a) $\cos^{-1}\left(\frac{\sqrt{2}}{2}\right)$

(b) $\cos^{-1} 1$

(c) $\cos^{-1}\left(-\frac{\sqrt{2}}{2}\right)$

8. -/3 points

SPreCalc6 5.5.008.

Find the exact value of each expression, if it is defined. (If an answer is undefined, enter UNDEFINED.)

(a) $\tan^{-1} 0$

(b) $\tan^{-1}(-\sqrt{3})$

(c) $\tan^{-1}\left(-\frac{\sqrt{3}}{3}\right)$

9. -/1 points

SPreCalc6 5.5.036.

Find the exact value of the expression, if it is defined. (If an answer is undefined, enter UNDEFINED.)

$$\tan^{-1}\left(\tan\left(\frac{4\pi}{3}\right)\right)$$

10. -/1 points

SPreCalc6 5.5.042.

Find the exact value of the expression, if it is defined. (If an answer is undefined, enter UNDEFINED.)

$$\tan\left(\sin^{-1} \frac{\sqrt{2}}{2}\right)$$

11. -/1 points

SPreCalc6 7.1.076.

Verify the identity.

$$\frac{1 + \cot x}{1 - \cot x} = \frac{\sin x + \cos x}{\sin x - \cos x}$$



This answer has not been graded yet.

12. -/1 points

SPreCalc6 7.1.078.

Verify the identity.

$$\frac{1}{1 - \cos x} - \frac{1}{1 + \cos x} = 2 \cot x \csc x$$



This answer has not been graded yet.

13.-/1 points

SPreCalc6 7.2.036.

Prove the identity.

$$\cot(x + y) = \frac{\cot y \cot x - 1}{\cot y + \cot x}$$



This answer has not been graded yet.

14.-/1 points

SPreCalc6 7.2.042.

Prove the identity.

$$\tan(z - x) + \tan(y - z) + \tan(x - y) = \tan(z - x) \tan(y - z) \tan(x - y)$$



This answer has not been graded yet.

15.-/1 points

SPreCalc6 7.3.088.

Prove the identity.

$$\frac{\sin x + \sin 3x + \sin 5x}{\cos x + \cos 3x + \cos 5x} = \tan 3x$$



This answer has not been graded yet.

16.-/1 points

SPreCalc6 7.3.080.

Prove the identity.

$$\cot 2x = \frac{1 - \tan^2 x}{2 \tan x}$$



This answer has not been graded yet.

