

Graphing Trigonometric Functions II

Date _____

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Using degrees, find the amplitude and period of each function. Then graph.

1) $y = \frac{1}{2} \cos (4\theta - 135) - 2$

2) $y = \frac{1}{2} \cos (2\theta + 120)$

3) $y = 3 \sin \left(\frac{\theta}{2} + 90 \right) - 1$

4) $y = \sin 3\theta + 2$

5) $y = 3 \cos \left(\frac{\theta}{2} - 45 \right) - 2$

6) $y = \frac{1}{2} \sin (2\theta - 30) - 2$

7) $y = 3 \sin (3\theta + 60) + 1$

8) $y = 2 + \frac{1}{2} \sin \left(\frac{\theta}{3} - 150 \right)$

9) $y = 4 \cos \frac{\theta}{2} + 1$

10) $y = 2 \sin \left(\frac{\theta}{3} + 240 \right) + 1$

11) $y = \sin (\theta + 45) + 2$

12) $y = 2 + 2 \sin \left(\frac{\theta}{3} + 60 \right)$

13) $y = 4 \sin (2\theta - 120) - 2$

14) $y = 4 \sin (4\theta + 225) + 1$

15) $y = -1 + 4 \sin \left(\frac{\theta}{4} - 300 \right)$

16) $y = -1 + \frac{1}{2} \cos (2\theta - 135)$

17) $y = 4 \sin \left(\frac{\theta}{4} + 60 \right)$

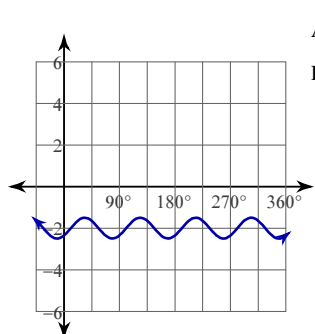
18) $y = 1 + 4 \cos (4\theta - 60)$

19) $y = \cos 3\theta$

20) $y = -1 + \sin (4\theta + 135)$

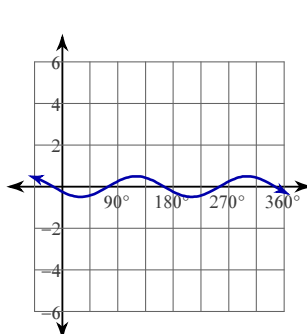
Answers to Graphing Trigonometric Functions II (ID: 1)

1)



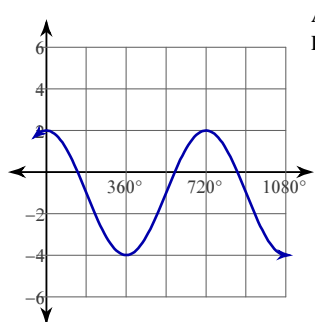
Amplitude: $\frac{1}{2}$
Period: 90°

2)



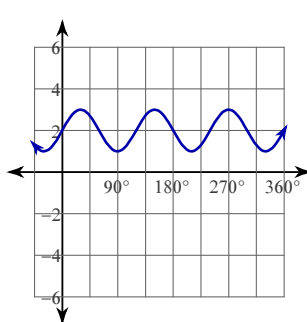
Amplitude: $\frac{1}{2}$
Period: 180°

3)



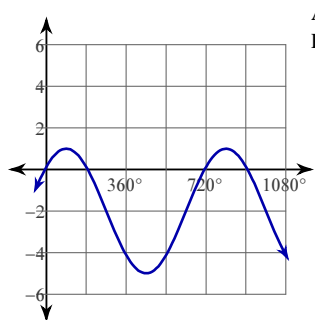
Amplitude: 3
Period: 720°

4)



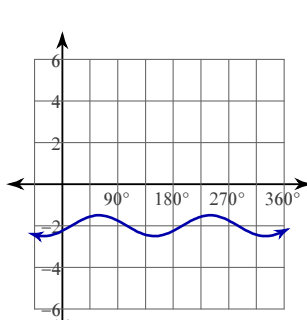
Amplitude: 1
Period: 120°

5)



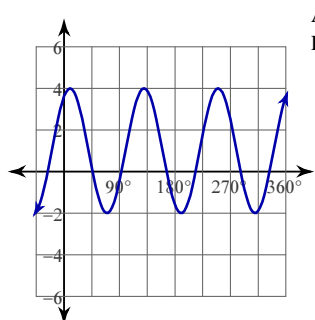
Amplitude: 3
Period: 720°

6)



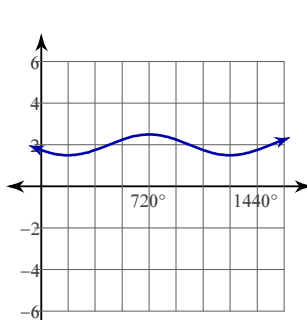
Amplitude: $\frac{1}{2}$
Period: 180°

7)



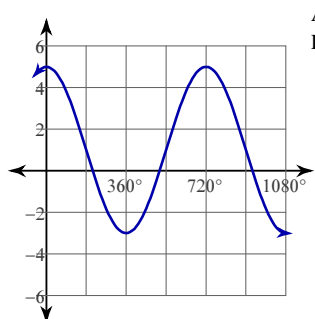
Amplitude: 3
Period: 120°

8)



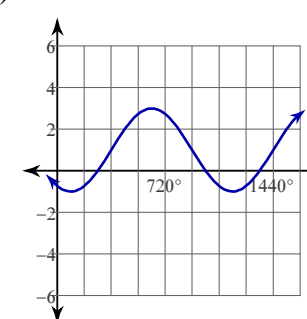
Amplitude: $\frac{1}{2}$
Period: 1080°

9)



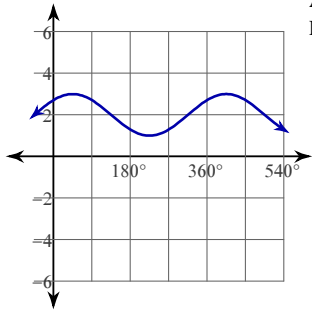
Amplitude: 4
Period: 720°

10)



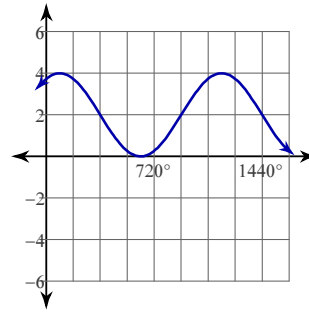
Amplitude: 2
Period: 1080°

11)



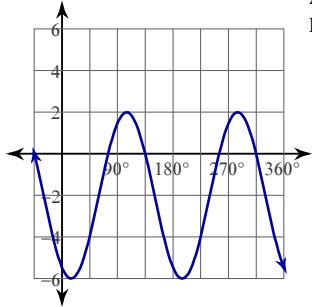
Amplitude: 1
Period: 360°

12)



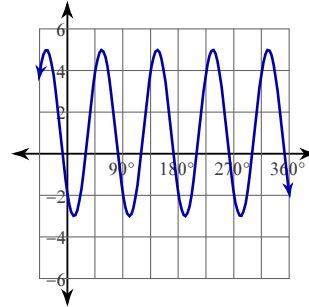
Amplitude: 2
Period: 1080°

13)



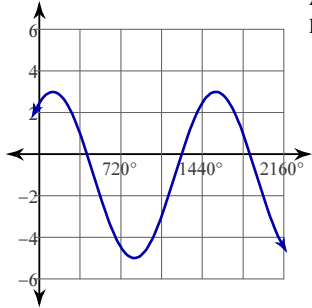
Amplitude: 4
Period: 180°

14)



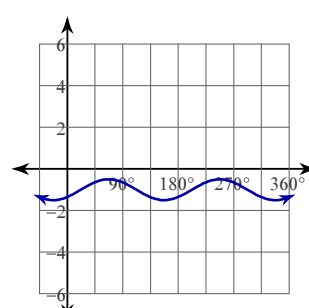
Amplitude: 4
Period: 90°

15)



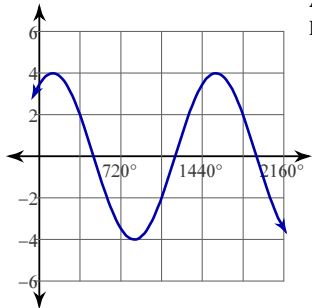
Amplitude: 4
Period: 1440°

16)



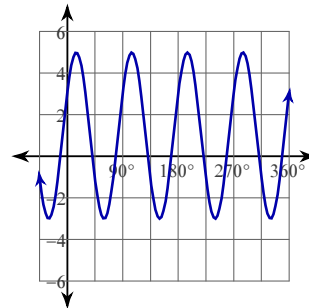
Amplitude: $\frac{1}{2}$
Period: 180°

17)



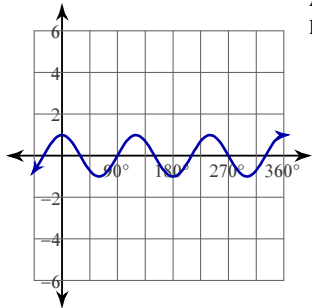
Amplitude: 4
Period: 1440°

18)



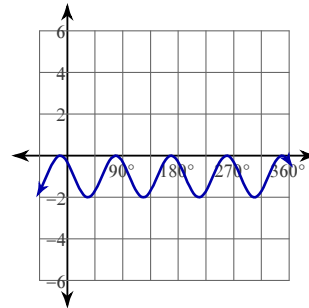
Amplitude: 4
Period: 90°

19)



Amplitude: 1
Period: 120°

20)



Amplitude: 1
Period: 90°

Graphing Trigonometric Functions II

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Using degrees, find the amplitude and period of each function. Then graph.

1) $y = \frac{1}{2} \sin \left(\frac{\theta}{3} - 60 \right) - 2$

2) $y = 4 \sin (2\theta - 150) + 1$

3) $y = 2 \cos (3\theta + 30) - 2$

4) $y = 2 \sin \theta$

5) $y = 2 \sin 2\theta - 2$

6) $y = 4 \cos (2\theta + 90) + 2$

7) $y = \frac{1}{2} \cos (2\theta - 240) + 2$

8) $y = \frac{1}{2} \cos (3\theta + 60) - 2$

9) $y = 2 \sin (3\theta + 135) - 1$

10) $y = \frac{1}{2} \cos \left(\frac{\theta}{4} + 90 \right) - 1$

11) $y = -2 + 3 \cos (3\theta + 135)$

12) $y = 2 \sin (3\theta + 60) - 2$

13) $y = 2 \sin (2\theta + 60) + 2$

14) $y = 4 \sin \left(\frac{\theta}{2} + 150 \right) - 1$

15) $y = 2 + 4 \sin (3\theta + 300)$

16) $y = -1 + 4 \cos 2\theta$

17) $y = 4 \sin (2\theta - 135) - 1$

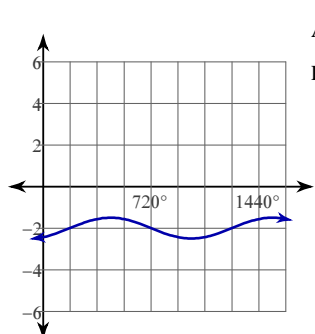
18) $y = \sin (4\theta - 225) - 2$

19) $y = 2 \sin (2\theta - 60) + 2$

20) $y = \frac{1}{2} \sin (2\theta - 150) - 2$

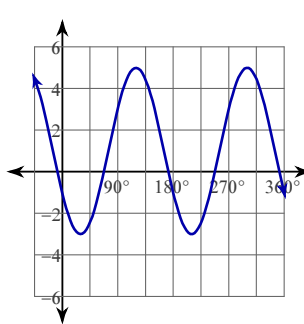
Answers to Graphing Trigonometric Functions II (ID: 2)

1)



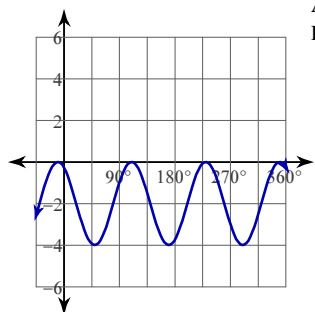
Amplitude: $\frac{1}{2}$
Period: 1080°

2)



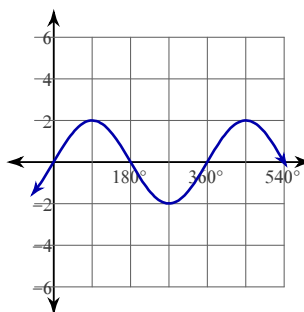
Amplitude: 4
Period: 180°

3)



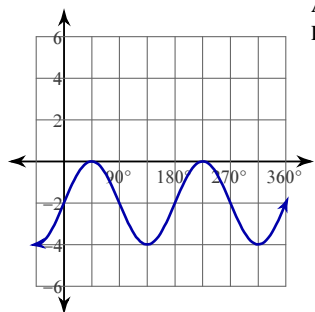
Amplitude: 2
Period: 120°

4)



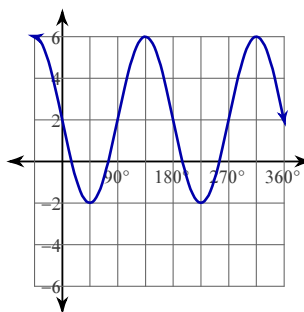
Amplitude: 2
Period: 360°

5)



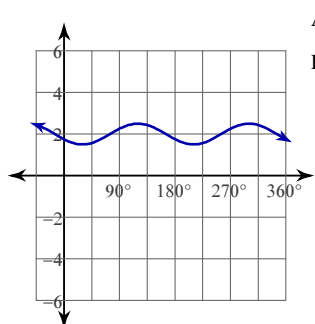
Amplitude: 2
Period: 180°

6)



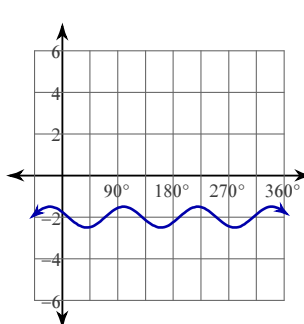
Amplitude: 4
Period: 180°

7)



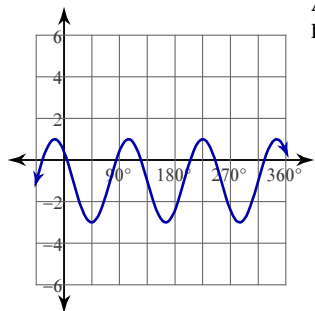
Amplitude: $\frac{1}{2}$
Period: 180°

8)



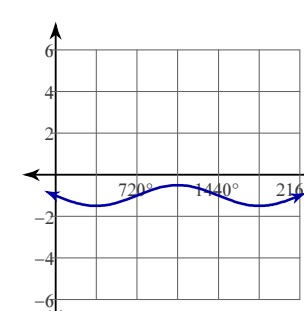
Amplitude: $\frac{1}{2}$
Period: 120°

9)



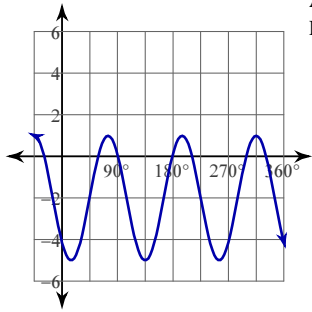
Amplitude: 2
Period: 120°

10)



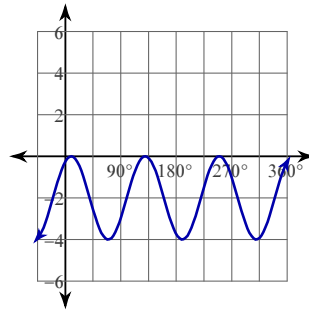
Amplitude: $\frac{1}{2}$
Period: 1440°

11)



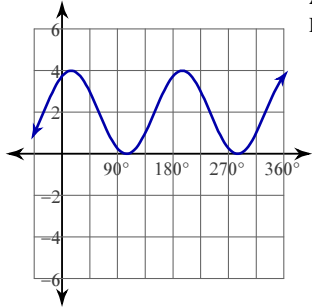
Amplitude: 3
Period: 120°

12)



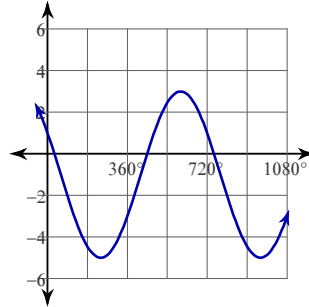
Amplitude: 2
Period: 120°

13)



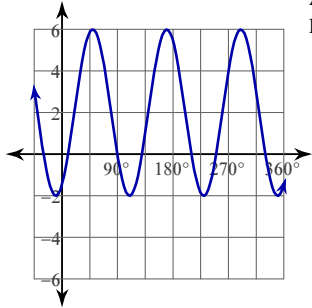
Amplitude: 2
Period: 180°

14)



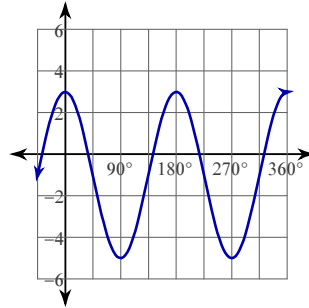
Amplitude: 4
Period: 720°

15)



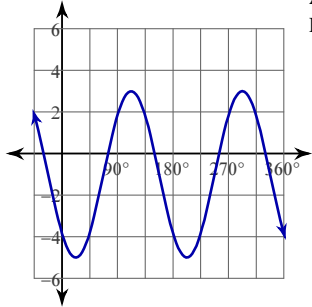
Amplitude: 4
Period: 120°

16)



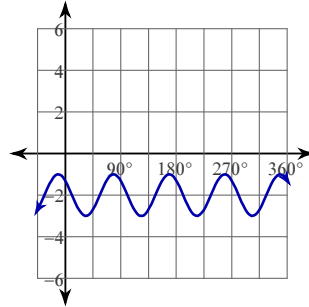
Amplitude: 4
Period: 180°

17)



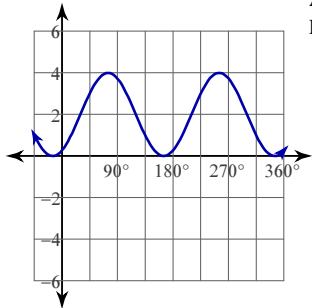
Amplitude: 4
Period: 180°

18)



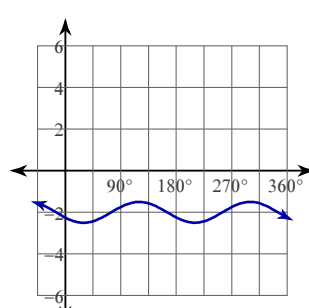
Amplitude: 1
Period: 90°

19)



Amplitude: 2
Period: 180°

20)



Amplitude: $\frac{1}{2}$
Period: 180°

Graphing Trigonometric Functions II

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Using degrees, find the amplitude and period of each function. Then graph.

1) $y = \sin 3\theta$

2) $y = 3\cos\left(\frac{\theta}{4} - 120\right) + 1$

3) $y = -2 + 2\sin\left(\frac{\theta}{4} - 60\right)$

4) $y = 3\cos\left(\frac{\theta}{2} + 135\right) + 1$

5) $y = 2\cos(4\theta + 150) + 1$

6) $y = 1 + 3\sin\left(\frac{\theta}{3} - 45\right)$

7) $y = 2 + 3\sin(2\theta - 60)$

8) $y = -2 + 2\cos(2\theta + 45)$

9) $y = -1 + 4\sin\left(\frac{\theta}{2} - 90\right)$

10) $y = 3\sin(2\theta + 90) + 1$

11) $y = 4\cos\left(\frac{\theta}{2} + 45\right) + 2$

12) $y = \frac{1}{2}\sin\left(\frac{\theta}{4} - 60\right) - 1$

13) $y = 4\sin(4\theta + 120) + 1$

14) $y = 1 + 4\sin\left(\frac{\theta}{3} + 30\right)$

15) $y = \frac{1}{2}\cos(4\theta + 120) + 1$

16) $y = 2 + \frac{1}{2}\cos\left(\frac{\theta}{4} + 30\right)$

17) $y = \frac{1}{2}\cos(2\theta - 30) - 1$

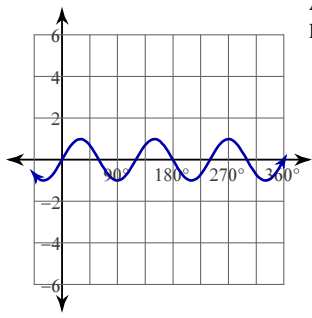
18) $y = -1 + 4\sin\left(\frac{\theta}{2} + 225\right)$

19) $y = 4\cos(4\theta - 150) - 1$

20) $y = 2\sin(3\theta - 45) - 1$

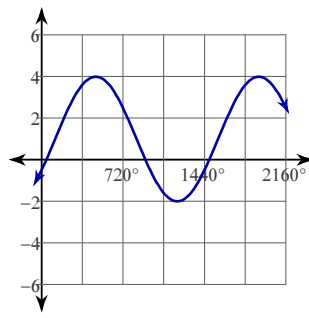
Answers to Graphing Trigonometric Functions II (ID: 3)

1)



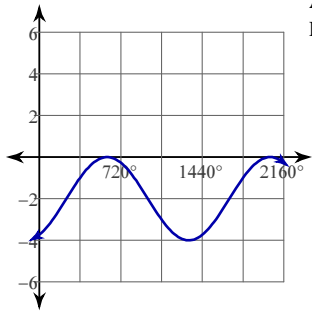
Amplitude: 1
Period: 120°

2)



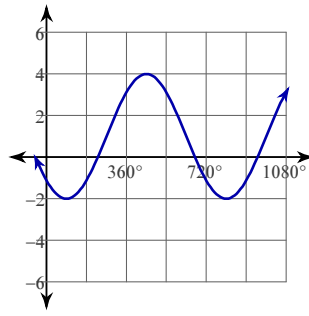
Amplitude: 3
Period: 1440°

3)



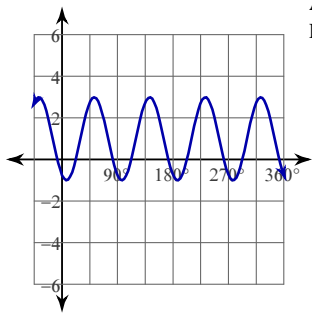
Amplitude: 2
Period: 1440°

4)



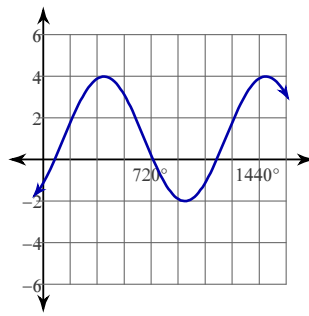
Amplitude: 3
Period: 720°

5)



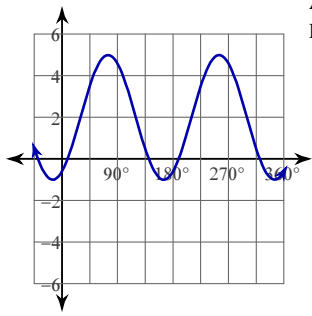
Amplitude: 2
Period: 90°

6)



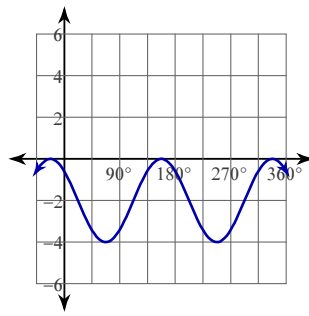
Amplitude: 3
Period: 1080°

7)



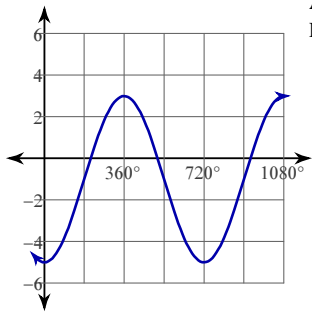
Amplitude: 3
Period: 180°

8)



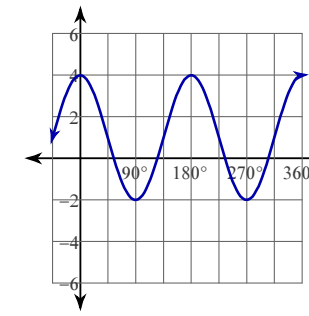
Amplitude: 2
Period: 180°

9)



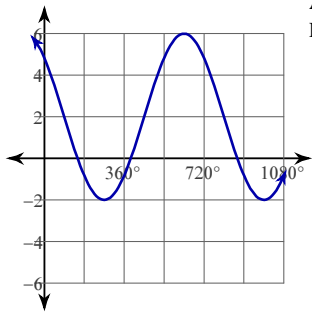
Amplitude: 4
Period: 720°

10)



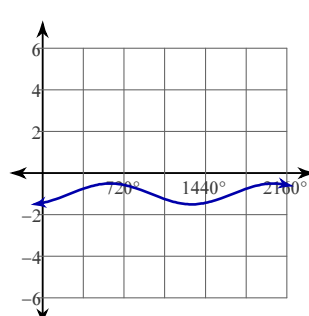
Amplitude: 3
Period: 180°

11)



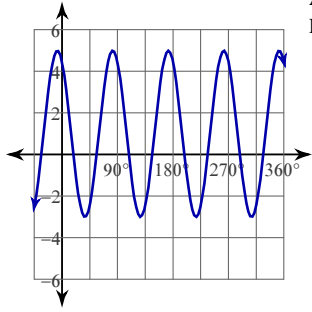
Amplitude: 4
Period: 720°

12)



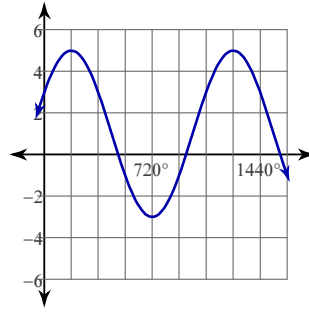
Amplitude: $\frac{1}{2}$
Period: 1440°

13)



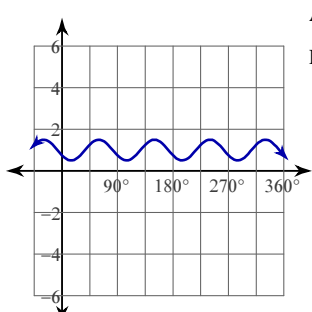
Amplitude: 4
Period: 90°

14)



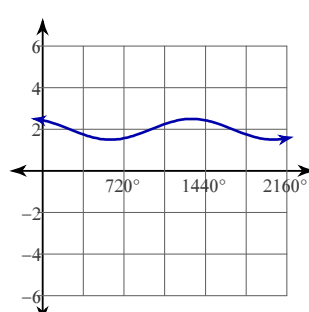
Amplitude: 4
Period: 1080°

15)



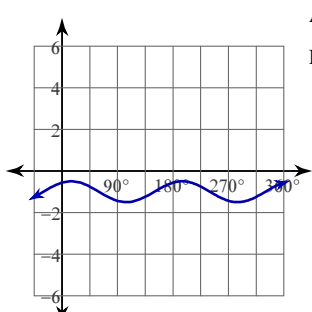
Amplitude: $\frac{1}{2}$
Period: 90°

16)



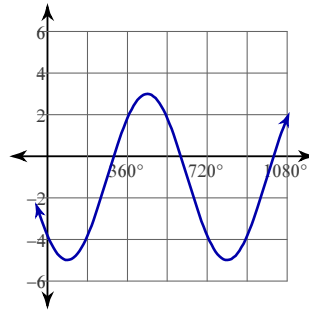
Amplitude: $\frac{1}{2}$
Period: 1440°

17)



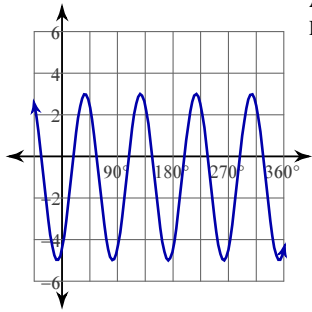
Amplitude: $\frac{1}{2}$
Period: 180°

18)



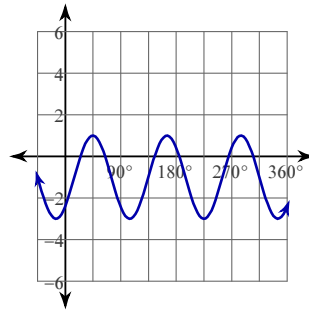
Amplitude: 4
Period: 720°

19)



Amplitude: 4
Period: 90°

20)



Amplitude: 2
Period: 120°