

Graphing Trigonometric Functions I

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

1) $y = 3\cos \frac{\theta}{4}$

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

3) $y = 2\cos \frac{\theta}{2}$

4) $y = 3\cos 4\theta$

5) $y = 3\cos 2\theta$

6) $y = 4\sin 3\theta$

7) $y = 4\cos 2\theta$

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9) $y = 3\cos 3\theta$

10) $y = \frac{1}{2}\cos 3\theta$

11) $y = 2\sin \frac{\theta}{3}$

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

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

14) $y = \sin \frac{\theta}{3}$

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

16) $y = 3\sin 3\theta$

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

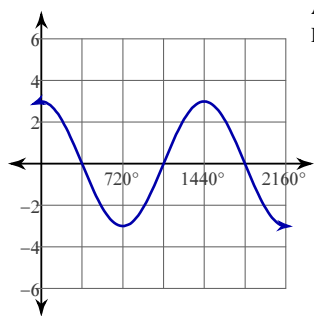
18) $y = 2\sin \theta$

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

20) $y = 2\sin 2\theta$

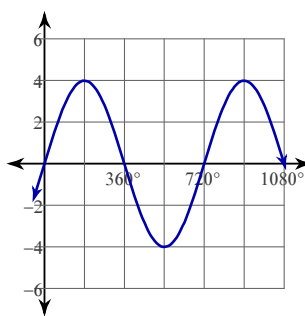
Answers to Graphing Trigonometric Functions I

1)



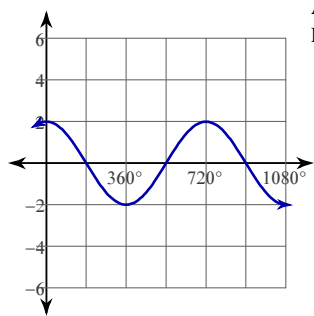
Amplitude: 3
Period: 1440°

2)



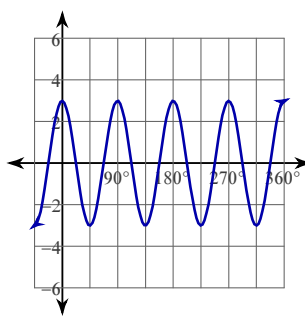
Amplitude: 4
Period: 720°

3)



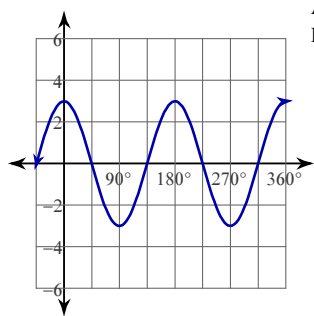
Amplitude: 2
Period: 720°

4)



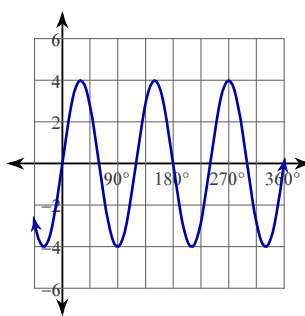
Amplitude: 3
Period: 90°

5)



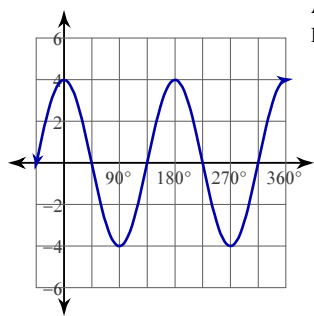
Amplitude: 3
Period: 180°

6)



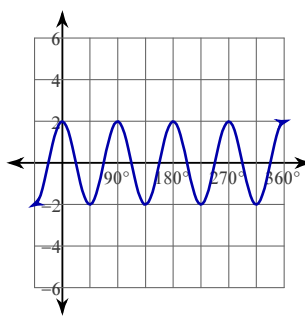
Amplitude: 4
Period: 120°

7)



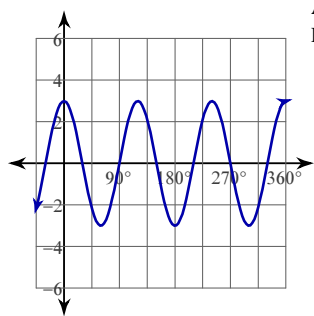
Amplitude: 4
Period: 180°

8)



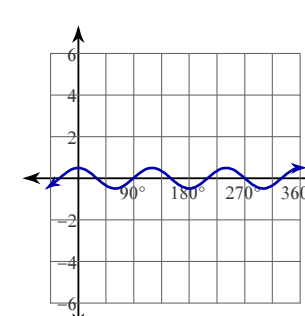
Amplitude: 2
Period: 90°

9)



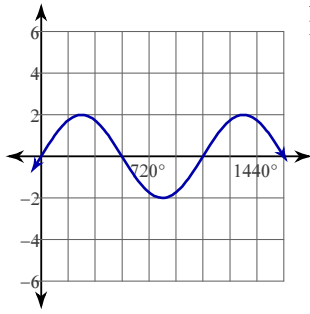
Amplitude: 3
Period: 120°

10)



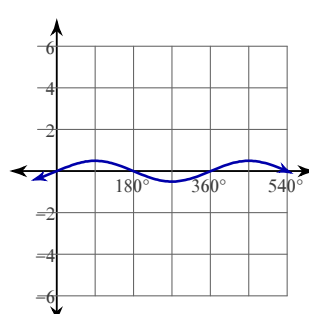
Amplitude: $\frac{1}{2}$
Period: 120°

11)



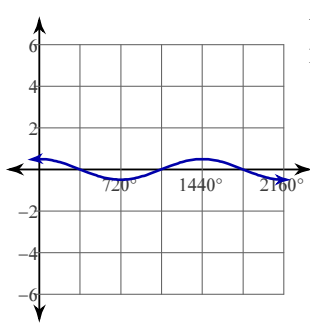
Amplitude: 2
Period: 1080°

12)



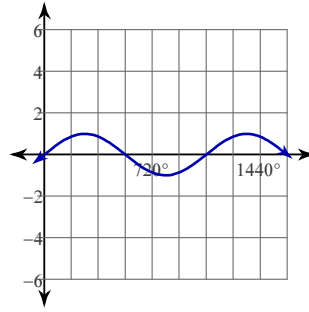
Amplitude: $\frac{1}{2}$
Period: 360°

13)



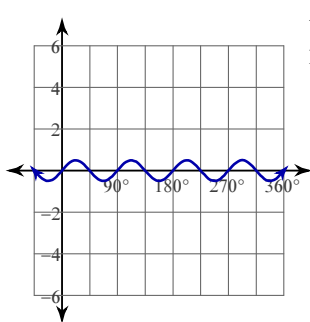
Amplitude: $\frac{1}{2}$
Period: 1440°

14)



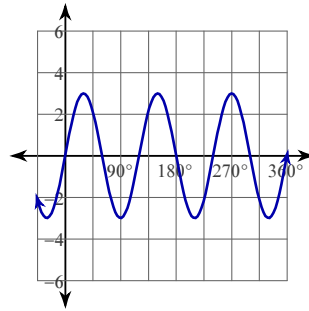
Amplitude: 1
Period: 1080°

15)



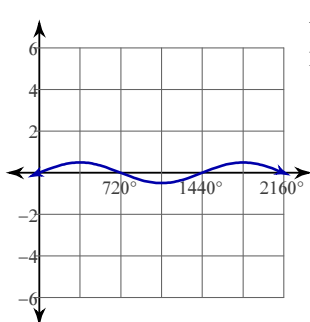
Amplitude: $\frac{1}{2}$
Period: 90°

16)



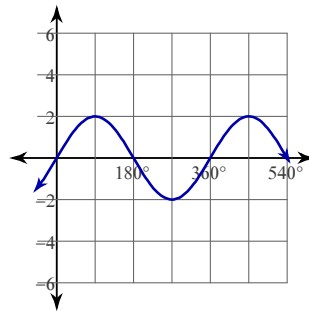
Amplitude: 3
Period: 120°

17)



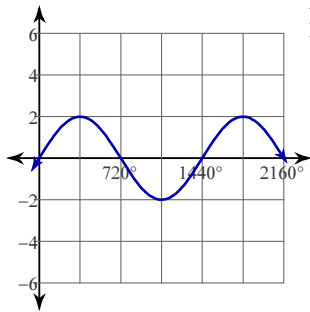
Amplitude: $\frac{1}{2}$
Period: 1440°

18)



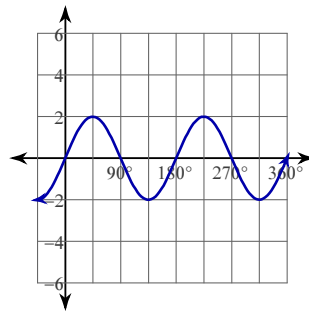
Amplitude: 2
Period: 360°

19)



Amplitude: 2
Period: 1440°

20)



Amplitude: 2
Period: 180°

Graphing Trigonometric Functions I

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

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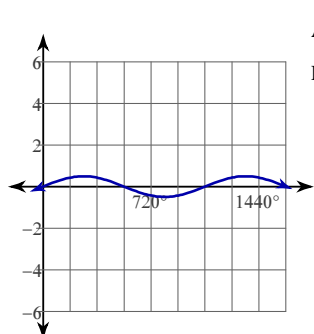
18) $y = 4 \cos \frac{\theta}{4}$

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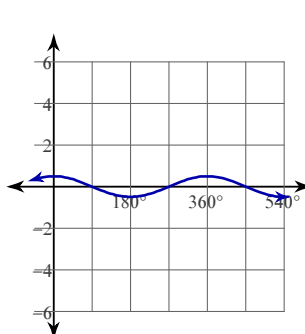
Answers to Graphing Trigonometric Functions I

1)



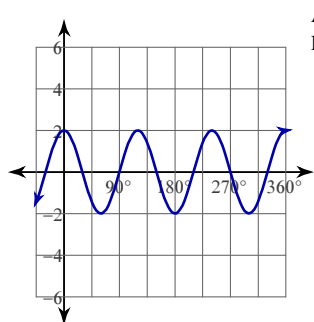
Amplitude: $\frac{1}{2}$
Period: 1080°

2)



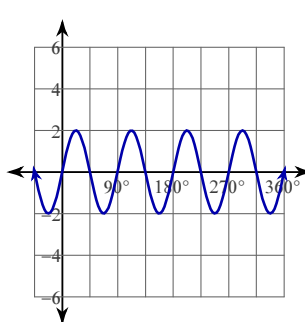
Amplitude: $\frac{1}{2}$
Period: 360°

3)



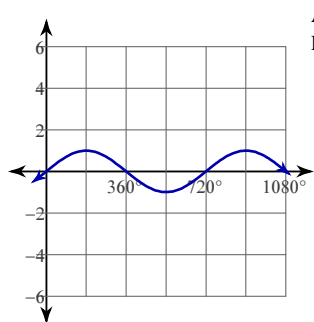
Amplitude: 2
Period: 120°

4)



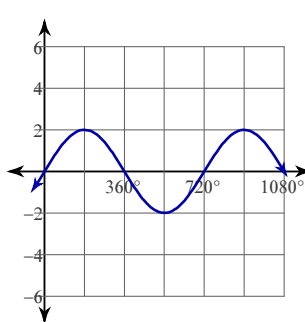
Amplitude: 2
Period: 90°

5)



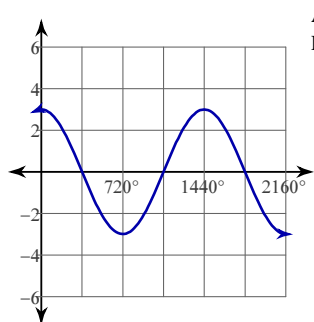
Amplitude: 1
Period: 720°

6)



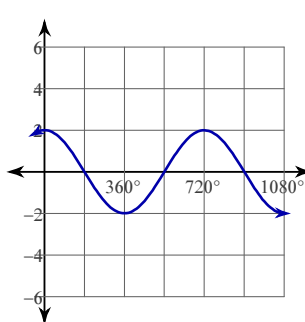
Amplitude: 2
Period: 720°

7)



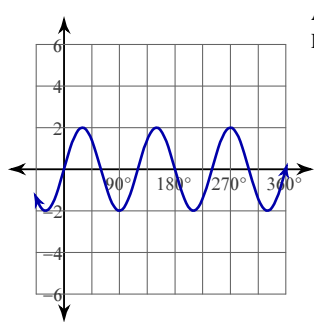
Amplitude: 3
Period: 1440°

8)



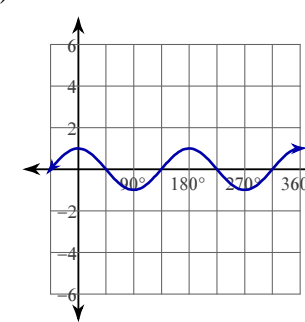
Amplitude: 2
Period: 720°

9)



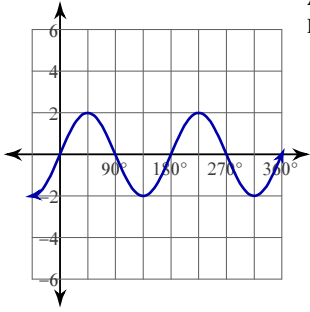
Amplitude: 2
Period: 120°

10)



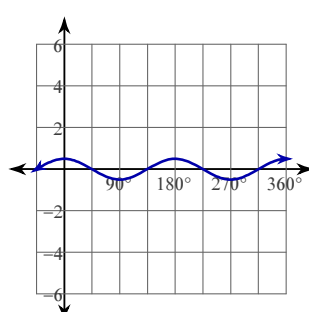
Amplitude: 1
Period: 180°

11)



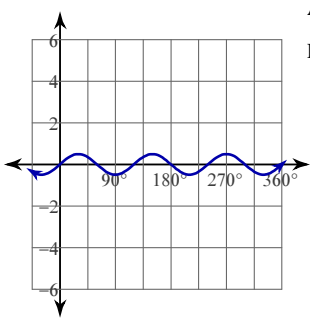
Amplitude: 2
Period: 180°

12)



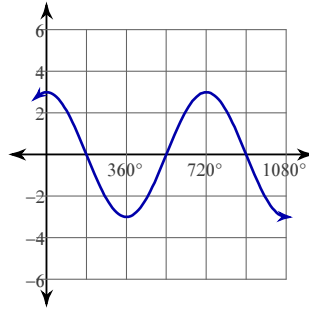
Amplitude: $\frac{1}{2}$
Period: 180°

13)



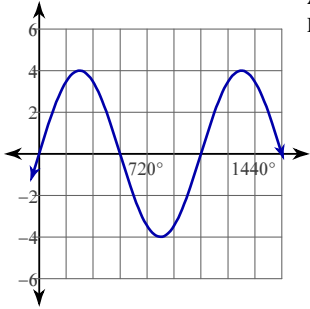
Amplitude: $\frac{1}{2}$
Period: 120°

14)



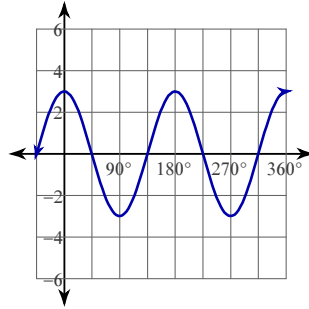
Amplitude: 3
Period: 720°

15)



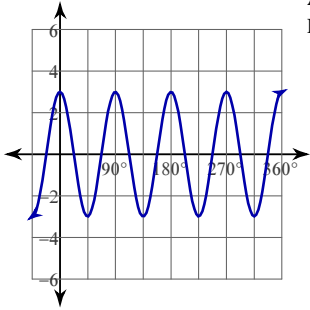
Amplitude: 4
Period: 1080°

16)



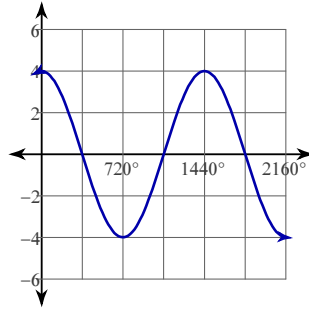
Amplitude: 3
Period: 180°

17)



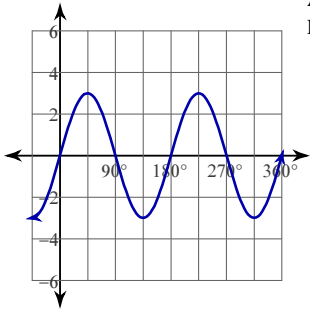
Amplitude: 3
Period: 90°

18)



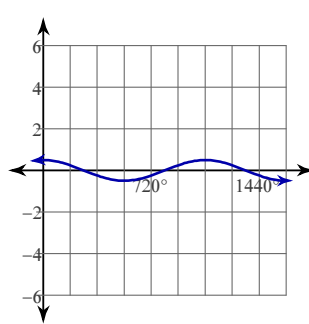
Amplitude: 4
Period: 1440°

19)



Amplitude: 3
Period: 180°

20)



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

Graphing Trigonometric Functions I

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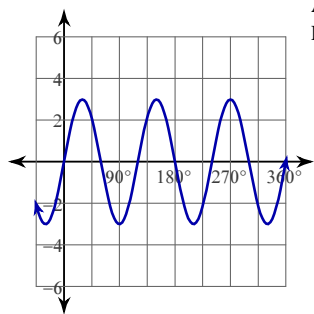
18) $y = \frac{1}{2}\cos 2\theta$

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

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

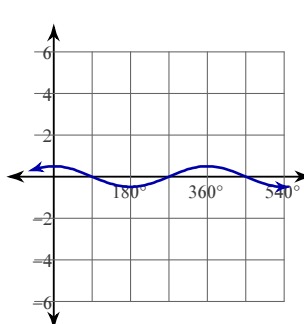
Answers to Graphing Trigonometric Functions I

1)



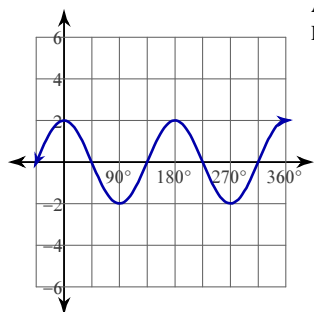
Amplitude: 3
Period: 120°

2)



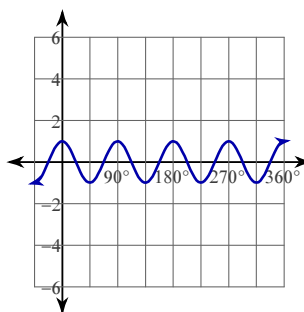
Amplitude: $\frac{1}{2}$
Period: 360°

3)



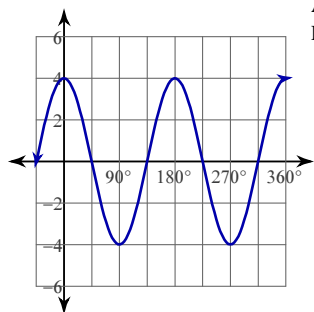
Amplitude: 2
Period: 180°

4)



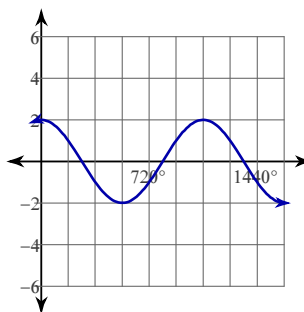
Amplitude: 1
Period: 90°

5)



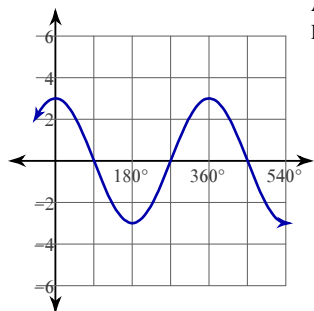
Amplitude: 4
Period: 180°

6)



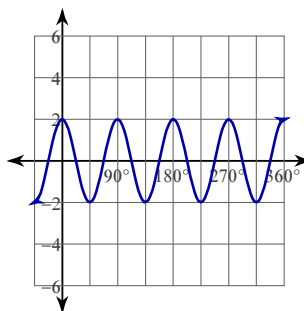
Amplitude: 2
Period: 1080°

7)



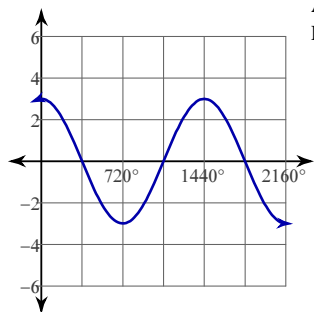
Amplitude: 3
Period: 360°

8)



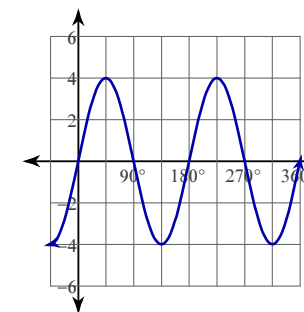
Amplitude: 2
Period: 90°

9)



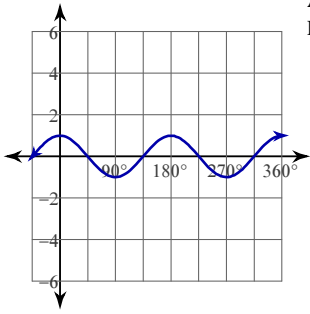
Amplitude: 3
Period: 1440°

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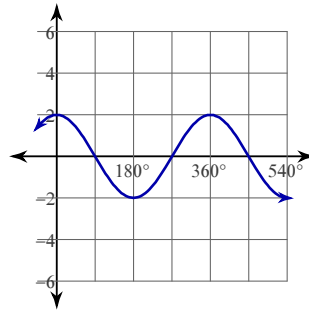
Amplitude: 4
Period: 180°

11)



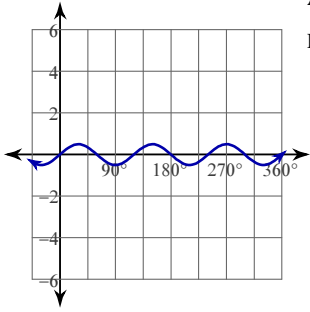
Amplitude: 1
Period: 180°

12)



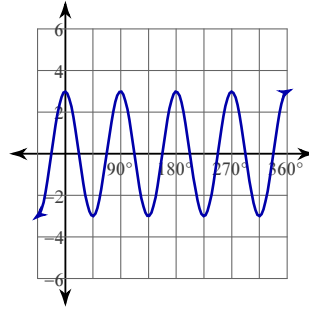
Amplitude: 2
Period: 360°

13)



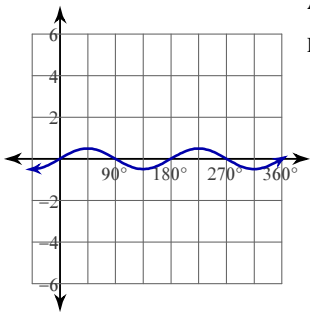
Amplitude: $\frac{1}{2}$
Period: 120°

14)



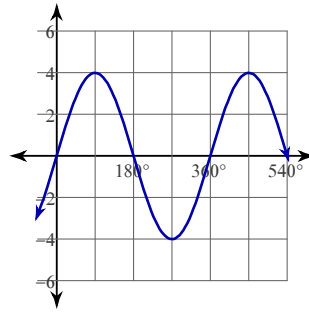
Amplitude: 3
Period: 90°

15)



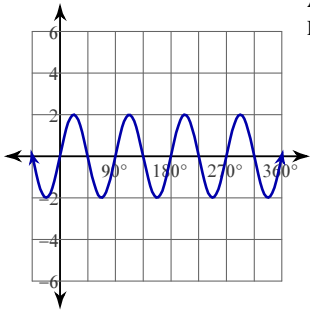
Amplitude: $\frac{1}{2}$
Period: 180°

16)



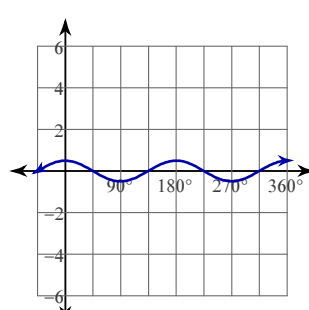
Amplitude: 4
Period: 360°

17)



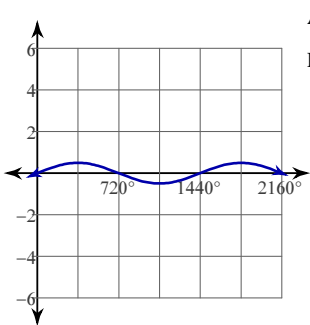
Amplitude: 2
Period: 90°

18)



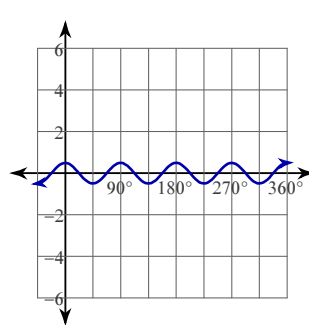
Amplitude: $\frac{1}{2}$
Period: 180°

19)



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

20)



Amplitude: $\frac{1}{2}$
Period: 90°