

**Graphing Trig Functions: Amplitude and Period #2****Using degrees, find the amplitude and period of each function.**

1)  $y = 2\sin 4\theta$

2)  $y = 9\cos 4\theta$

3)  $y = \frac{1}{6} \cdot \sin 6\theta$

4)  $y = \frac{1}{10} \cdot \tan \frac{\theta}{8}$

5)  $y = 4\sin 5\theta$

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

7)  $y = 7\sin \theta$

8)  $y = 9\sin 7\theta$

9)  $y = \frac{1}{7} \cdot \cos \theta$

10)  $y = 9\sin \frac{\theta}{6}$

Using radians, find the amplitude and period of each function.

11)  $y = 5\sin \theta$

12)  $y = 5\sin 8\theta$

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

14)  $y = 5\cos \theta$

15)  $y = 10\tan 8\theta$

16)  $y = 8\sin 2\theta$

17)  $y = \sin 2\theta$

18)  $y = 6\sin 6\theta$

19)  $y = 10\sin 3\theta$

20)  $y = 8\cos \frac{\theta}{8}$

## Answers to Graphing Trig Functions: Amplitude and Period #2

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|--|---|---|--|
| 1) Amplitude: 2<br>Period: $90^\circ$              | 2) Amplitude: 9<br>Period: $90^\circ$       | 3) Amplitude: $\frac{1}{6}$<br>Period: $60^\circ$ | 4) Amplitude: None<br>Period: $1440^\circ$       |
| 5) Amplitude: 4<br>Period: $72^\circ$              | 6) Amplitude: 2<br>Period: $720^\circ$      | 7) Amplitude: 7<br>Period: $360^\circ$            | 8) Amplitude: 9<br>Period: $\frac{360^\circ}{7}$ |
| 9) Amplitude: $\frac{1}{7}$<br>Period: $360^\circ$ | 10) Amplitude: 9<br>Period: $2160^\circ$    | 11) Amplitude: 5<br>Period: $2\pi$                | 12) Amplitude: 5<br>Period: $\frac{\pi}{4}$      |
| 13) Amplitude: 3<br>Period: $\frac{2\pi}{5}$       | 14) Amplitude: 5<br>Period: $2\pi$          | 15) Amplitude: None<br>Period: $\frac{\pi}{8}$    | 16) Amplitude: 8<br>Period: $\pi$                |
| 17) Amplitude: 1<br>Period: $\pi$                  | 18) Amplitude: 6<br>Period: $\frac{\pi}{3}$ | 19) Amplitude: 10<br>Period: $\frac{2\pi}{3}$     | 20) Amplitude: 8<br>Period: $16\pi$              |