

The Secret in Pre-Cal of Making Trigonometric Graphs and Analysis

Lesson 170 | Trigonometry | Sine and cosine graphs

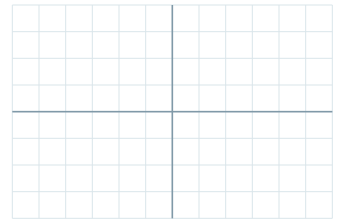
<https://www.youtube.com/watch?v=P6kuOAFIhA>

Original practice aligned to the saved video title.

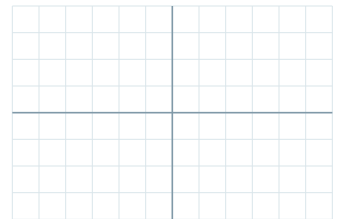
Name: _____ Date: _____ Show your reasoning.

01

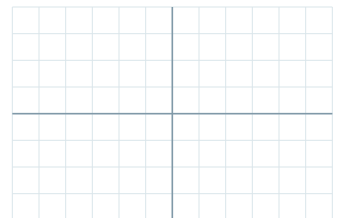
Analyze and sketch one cycle of $y=14\sin(5(x-(6)))+3$. Give amplitude, period, phase shift, midline, and five key points.

**02**

Analyze and sketch one cycle of $y=7\sin(6(x-(-8)))+12$. Give amplitude, period, phase shift, midline, and five key points.

**03**

Analyze and sketch one cycle of $y=14\sin(2(x-(5)))+7$. Give amplitude, period, phase shift, midline, and five key points.



The Secret in Pre-Cal of Making Trigonometric Graphs and Analysis

Lesson 170 | Trigonometry | Sine and cosine graphs

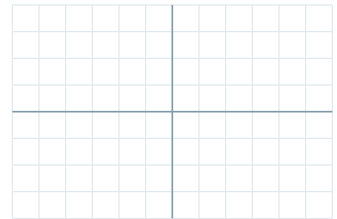
<https://www.youtube.com/watch?v=P6kuOAFIhA>

Original practice aligned to the saved video title.

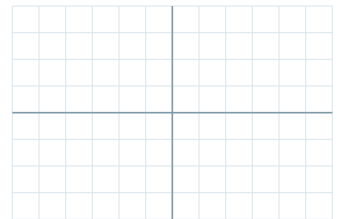
Name: _____ Date: _____ Show your reasoning.

04

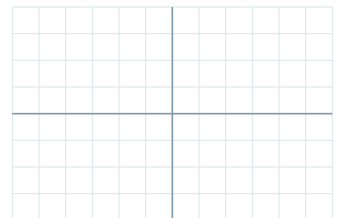
Analyze and sketch one cycle of $y=13\sin(7(x-(-9)))+7$. Give amplitude, period, phase shift, midline, and five key points.

**05**

Analyze and sketch one cycle of $y=5\sin(2(x-(7)))+9$. Give amplitude, period, phase shift, midline, and five key points.

**06**

Analyze and sketch one cycle of $y=2\sin(7(x-(6)))+3$. Give amplitude, period, phase shift, midline, and five key points.



The Secret in Pre-Cal of Making Trigonometric Graphs and Analysis

Lesson 170 | Trigonometry | Sine and cosine graphs

<https://www.youtube.com/watch?v=P6kuOAFIhhA>

Original practice aligned to the saved video title.

01

Analyze and sketch one cycle of $y=14\sin(5(x-(6)))+3$. Give amplitude, period, phase shift, midline, and five key points.

Amplitude 14; period $2\pi/5$; shift 6; midline $y=3$. Start at $x=6$; use x-increments $\pi/10$. The five y-values are 3,17,3,-11,3.

02

Analyze and sketch one cycle of $y=7\sin(6(x-(-8)))+12$. Give amplitude, period, phase shift, midline, and five key points.

Amplitude 7; period $2\pi/6$; shift -8; midline $y=12$. Start at $x=-8$; use x-increments $\pi/12$. The five y-values are 12,19,12,5,12.

03

Analyze and sketch one cycle of $y=14\sin(2(x-(5)))+7$. Give amplitude, period, phase shift, midline, and five key points.

Amplitude 14; period $2\pi/2$; shift 5; midline $y=7$. Start at $x=5$; use x-increments $\pi/4$. The five y-values are 7,21,7,-7,7.

The Secret in Pre-Cal of Making Trigonometric Graphs and Analysis

Lesson 170 | Trigonometry | Sine and cosine graphs

<https://www.youtube.com/watch?v=P6kuOAFIhhA>

Original practice aligned to the saved video title.

04

Analyze and sketch one cycle of $y=13\sin(7(x-(-9)))+7$. Give amplitude, period, phase shift, midline, and five key points.

Amplitude 13; period $2\pi/7$; shift -9; midline $y=7$. Start at $x=-9$; use x-increments $\pi/14$. The five y-values are 7, 20, 7, -6, 7.

05

Analyze and sketch one cycle of $y=5\sin(2(x-(7)))+9$. Give amplitude, period, phase shift, midline, and five key points.

Amplitude 5; period $2\pi/2$; shift 7; midline $y=9$. Start at $x=7$; use x-increments $\pi/4$. The five y-values are 9, 14, 9, 4, 9.

06

Analyze and sketch one cycle of $y=2\sin(7(x-(6)))+3$. Give amplitude, period, phase shift, midline, and five key points.

Amplitude 2; period $2\pi/7$; shift 6; midline $y=3$. Start at $x=6$; use x-increments $\pi/14$. The five y-values are 3, 5, 3, 1, 3.