mobius

Sinusoidal Function Parameters (3 Params) - Function to Parameters

1 What are the phase shift, period, and amplitude of this sinusoidal function?

$$f(x) = -\frac{7}{2}\sin(\frac{7}{11}\pi x + \frac{2}{3})$$

A	B	C	D
Amplitude $= \frac{7}{2}$	Amplitude $= \frac{7}{2}$	Amplitude $= \frac{7}{2}$	Amplitude $= \frac{7}{2}$
Period $= \frac{22}{7}$	Period $= \frac{22}{7}$	Period $= \frac{22}{7}$	Period $= \frac{6}{2}$
Phase Shift $= \frac{2}{3}\pi$ left	Phase Shift $= \frac{2}{3}$ left	Phase Shift $= \frac{2}{3}$ right	Phase Shift $= \frac{7}{11}$ left

2 What are the phase shift, period, and vertical shift of this sinusoidal function?

$$f(x) = \sin(\frac{3}{7}x + \frac{2}{7}) + \frac{2}{3}$$

A	B	C	D
Period $= \frac{14\pi}{2}$	Period $= \frac{14\pi}{3}$	Period $= \frac{6\pi}{2}$	Period $= \frac{14\pi}{3}$
Phase Shift $= \frac{3}{7}$ left	Phase Shift $= \frac{2}{7}$ right	Phase Shift $= \frac{2}{7}$ left	Phase Shift $= \frac{2}{7}$ left
Vertical Shift $= \frac{2}{3}$	Vertical Shift $= \frac{2}{3}$	Vertical Shift $= \frac{3}{7}$	Vertical Shift $= \frac{2}{3}$

3 What are the amplitude, vertical shift, and phase shift of this sinusoidal function?

$$f(x) = \frac{8}{7}\sin(x + \frac{5}{11}\pi) + \frac{4}{7}$$

A	B	C	D
Amplitude $= \frac{8}{7}$	Amplitude $= \frac{8}{7}$	Amplitude $= \frac{8}{7}$	Amplitude $= \frac{4}{7}$
Phase Shift $= \frac{5}{11}\pi$ right	Phase Shift $= \frac{5}{11}\pi$ left	Phase Shift $= \frac{4}{7}\pi$ left	Phase Shift $= \frac{5}{11}\pi$ left
Vertical Shift $= \frac{4}{7}$	Vertical Shift $= \frac{4}{7}$	Vertical Shift $= \frac{5}{11}$	Vertical Shift $= \frac{8}{7}$

4 What are the phase shift, amplitude, and vertical shift of this sinusoidal function?

$$f(x) = \frac{6}{5}\cos(x + \frac{7}{3}\pi) + \frac{4}{11}$$

A	B	C	D
Amplitude $= \frac{6}{5}$	Amplitude $= \frac{7}{3}$	Amplitude $= \frac{6}{5}$	Amplitude $= \frac{6}{5}$
Phase Shift $= \frac{7}{3}$ left	Phase Shift $= \frac{6}{5}\pi$ left	Phase Shift $= \frac{7}{3}\pi$ right	Phase Shift $= \frac{7}{3}\pi$ left
Vertical Shift $= \frac{4}{11}$	Vertical Shift $= \frac{4}{11}$	Vertical Shift $= \frac{4}{11}$	Vertical Shift $= \frac{4}{11}$

5 What are the phase shift, vertical shift, and period of this sinusoidal function?

$$f(x) = \sin(\frac{5}{3}\pi x + \frac{7}{5}) + \frac{7}{2}$$

A	B	C	D
Period $= \frac{6}{5}$	Period $= \frac{6}{5}$	Period $= \frac{6}{5}$	Period $= \frac{6}{5}$
Phase Shift $= \frac{7}{2}$ left	Phase Shift $= \frac{7}{5}$ right	Phase Shift $= \frac{7}{5}\pi$ left	Phase Shift $= \frac{7}{5}$ left
Vertical Shift $= \frac{7}{5}$	Vertical Shift $= \frac{7}{2}$	Vertical Shift $= \frac{7}{2}$	Vertical Shift $= \frac{7}{2}$

6 What are the period, vertical shift, and amplitude of this sinusoidal function?

$$f(x) = -\frac{6}{5}\cos(\frac{8}{7}\pi x) + 2$$

A	B	C	D
Amplitude $= \frac{8}{7}$	Amplitude $= \frac{6}{5}$	Amplitude $= \frac{6}{5}$	Amplitude $= \frac{6}{5}$
Period $= \frac{10}{6}$	Period $= \frac{14}{8}$	Period $= \frac{2}{2}$	Period $= \frac{14\pi}{8}$
Vertical Shift $= 2$	Vertical Shift $= 2$	Vertical Shift $= \frac{8}{7}$	Vertical Shift $= 2$

7 What are the period, vertical shift, and phase shift of this sinusoidal function?

$$f(x) = \sin(\frac{8}{11}\pi x + \frac{6}{7}\pi) + \frac{8}{3}$$

A	B	C	D
Period $= \frac{22}{8}$	Period $= \frac{22\pi}{8}$	Period $= \frac{22}{8}$	Period $= \frac{22}{8}$
Phase Shift $= \frac{6}{7}$ left	Phase Shift $= \frac{6}{7}\pi$ left	Phase Shift $= \frac{6}{7}\pi$ left	Phase Shift $= \frac{8}{3}\pi$ left
Vertical Shift $= \frac{8}{3}$	Vertical Shift $= \frac{8}{3}$	Vertical Shift $= \frac{8}{3}$	Vertical Shift $= \frac{6}{7}$

8 What are the vertical shift, period, and phase shift of this sinusoidal function?

$$f(x) = \cos(4x + \frac{4}{7}\pi) + \frac{3}{11}$$

A	B	C	D
Period $= \frac{2\pi}{4}$	Period $= \frac{2\pi}{4}$	Period $= \frac{2\pi}{4}$	Period $= \frac{14\pi}{4}$
Phase Shift $= \frac{4}{7}\pi$ left	Phase Shift $= \frac{4}{7}\pi$ right	Phase Shift $= \frac{4}{7}$ left	Phase Shift $= 4\pi$ left
Vertical Shift $= \frac{3}{11}$	Vertical Shift $= \frac{3}{11}$	Vertical Shift $= \frac{3}{11}$	Vertical Shift $= \frac{3}{11}$