PRACTICE Quiz 5.2 Graph Amplitude & Period change (Sin & Cos)

Find the amplitude, the period in radians, the minimum and maximum values, and the transformations required to obtain the graph starting with a basic trig function.

$$1) \ \ y = \frac{1}{10} \cdot \cos 5\theta$$

 $y = \frac{10}{10} \cdot \cos 3$ Amp:

Period:

Min:

Max:

Transformation:

 $2) \ \ y = \frac{1}{8} \cdot \sin \frac{\theta}{3}$

Amp:

Period:

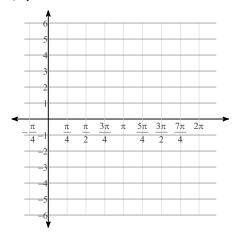
Min:

Max:

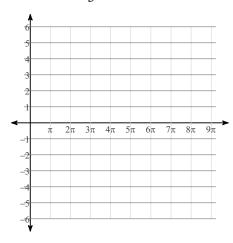
Transformation:

Graph each function using radians.

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



4)
$$y = 2\cos\frac{\theta}{3}$$



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Find the amplitude, the period in radians, the minimum and maximum values, and the transformations required to obtain the graph starting with a basic trig function.

$$1) \ \ y = \frac{1}{10} \cdot \cos 5\theta$$

Amp:

Period:

Min:

Max:

Transformation:

Amplitude: $\frac{1}{10}$

Period: $\frac{2\pi}{5}$

Min: $-\frac{1}{10}$

Max: $\frac{1}{10}$

Transformations: Starting with $\cos \theta$, vertically shrink by

 $\frac{1}{10}$, horizontally

shrink by $\frac{1}{5}$

$$2) \ \ y = \frac{1}{8} \cdot \sin \frac{\theta}{3}$$

Amp:

Period:

Min:

Max:

Transformation:

Amplitude: $\frac{1}{9}$

Period: 6π

Min: $-\frac{1}{8}$

Max: $\frac{1}{8}$

Transformations:

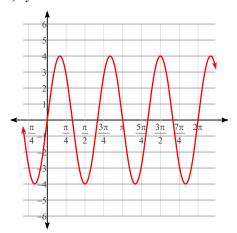
Starting with $\sin \theta$,

vertically shrink by $\frac{1}{2}$,

horizontally stretch by 3

Graph each function using radians.

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



4)
$$y = 2\cos\frac{\theta}{3}$$

