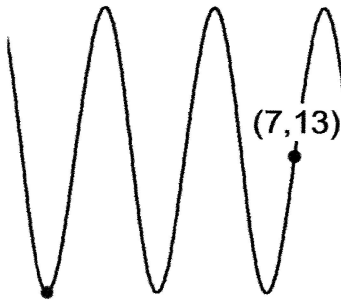


Practice #17 Alg 2 Sec 7-4 Periodic Functions Friday, April 17, 2020

Find the period, amplitude, and equation of the midline for each periodic function. Give period in terms of π and in reduced fractional form.

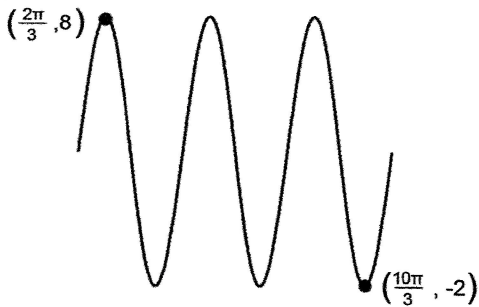


1. $(-5, 6)$

Amplitude =

Eq of Midline:

Period =

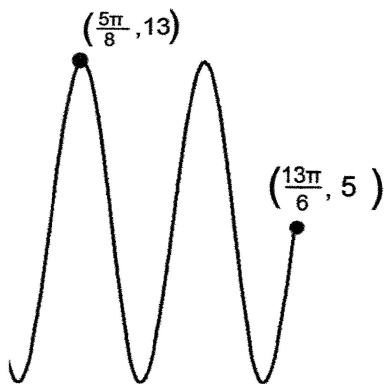


2.

Amplitude =

Eq of Midline:

Period =



3.

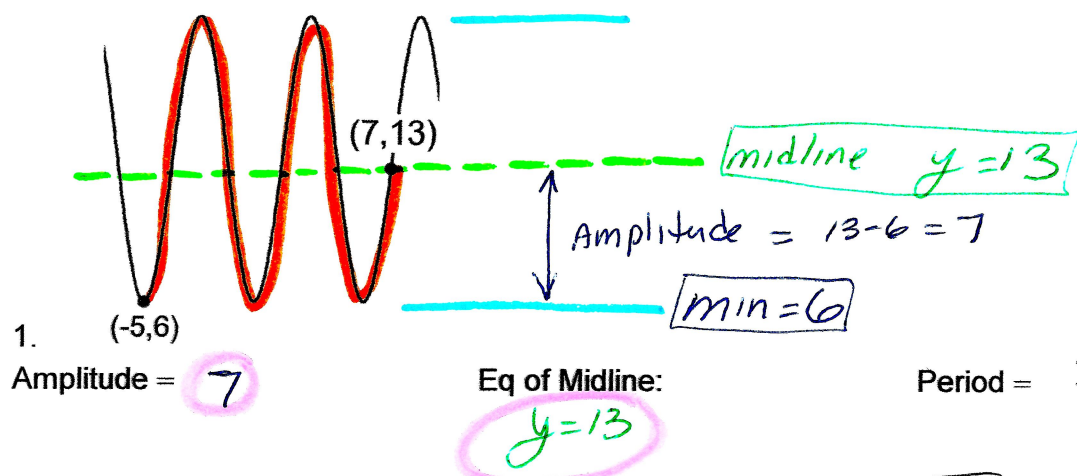
Amplitude =

Eq of Midline:

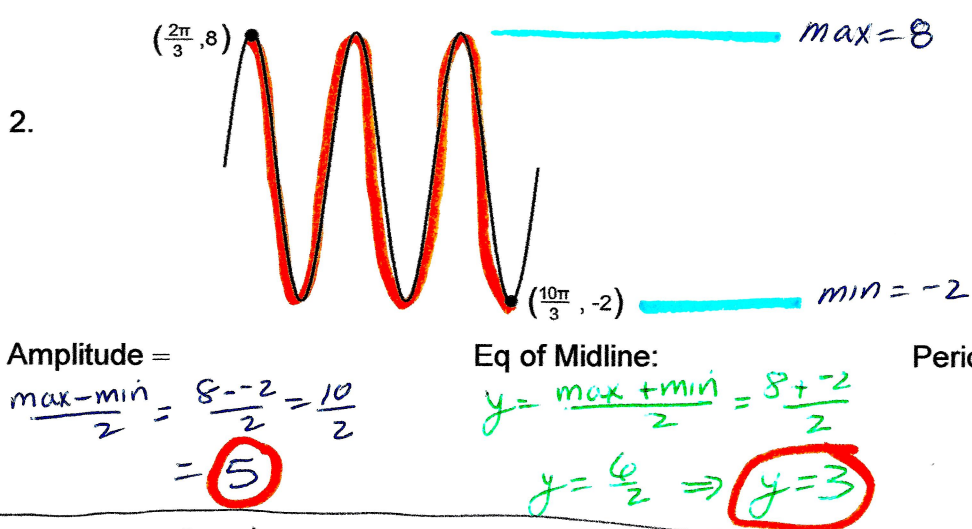
Period =

Practice #17 Alg 2 Sec 7-4 Periodic Functions Friday, April 17, 2020

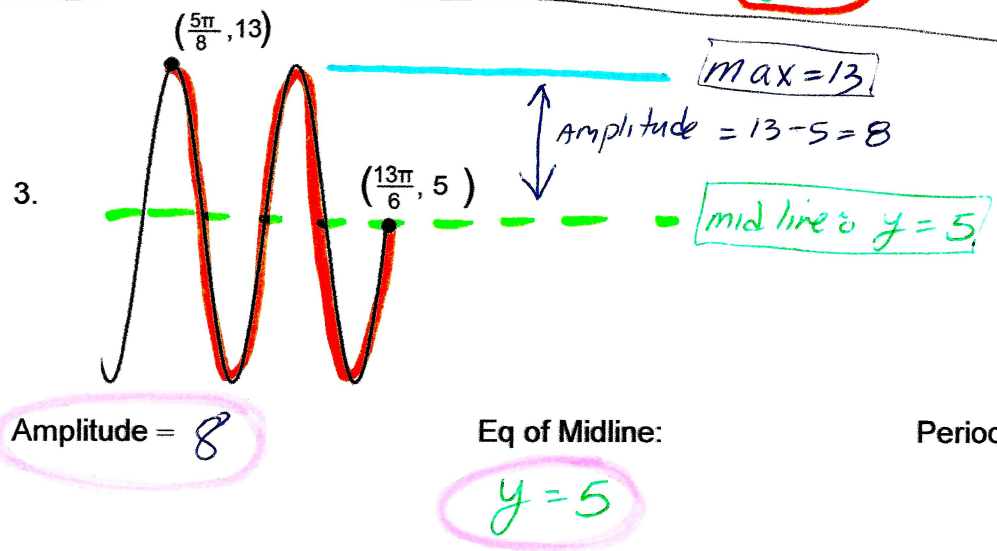
Find the period, amplitude, and equation of the midline for each periodic function. Give period in terms of π and in reduced fractional form.



Period = $\frac{\text{TOTAL WIDTH}}{\# \text{ cycles}} = \frac{7 - (-5)}{2\frac{1}{4} \text{ cycles}}$
 $= \frac{12}{2\frac{1}{4}} = \frac{12}{\frac{9}{4}}$
 $= 12 \cdot \frac{4}{9} = \frac{16}{3}$



Period = $\frac{\text{TOTAL WIDTH}}{\# \text{ cycles}} = \frac{\frac{10\pi}{3} - \frac{2\pi}{3}}{2\frac{1}{2} \text{ cycles}}$
 $= \frac{\frac{8\pi}{3}}{\frac{5}{2}}$
 $= \frac{8\pi}{3} \cdot \frac{2}{5} = \frac{16\pi}{15}$



Period = $\frac{\text{TOTAL DISTANCE}}{\# \text{ CYCLES}}$ LCD = 24
 $= \frac{\frac{4}{7} \cdot \frac{13\pi}{6} - \frac{5\pi}{8} \cdot \frac{3}{3}}{1\frac{3}{4} \text{ cycles}} = \frac{\frac{52\pi}{42} - \frac{15\pi}{24}}{\frac{7}{4}}$
 $= \frac{37\pi}{42} \cdot \frac{4}{7} = \frac{37\pi}{42}$