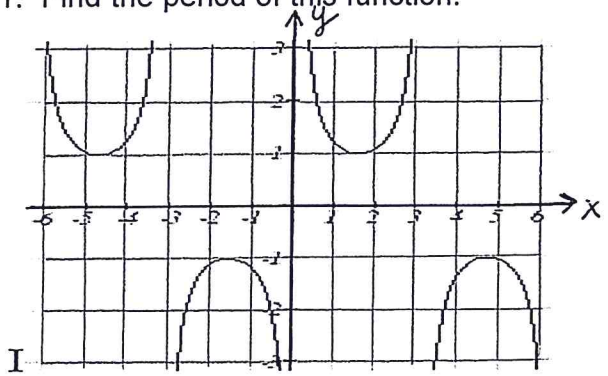
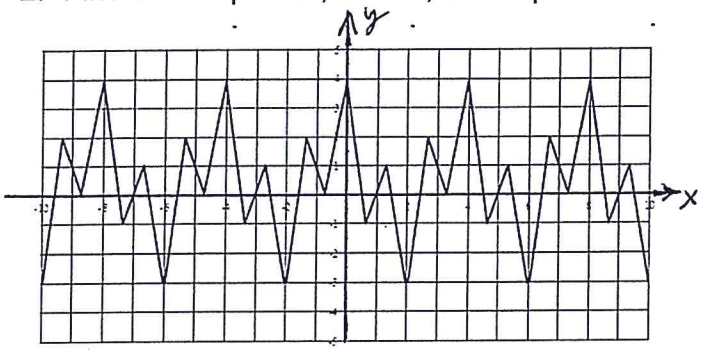
Algebra 2 Bellwork Tuesday, May 3, 2016

1. Find the period of this function:



I

2. Find the Amplitude, Period, and Equation of the Midline for this periodic function.

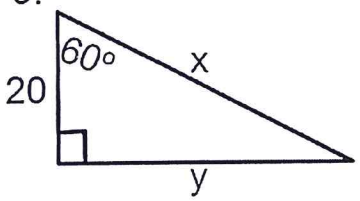


Use the following relationships in Special Right Triangles to find the exact value of each missing side. Make sure you rationalize denominators when needed.

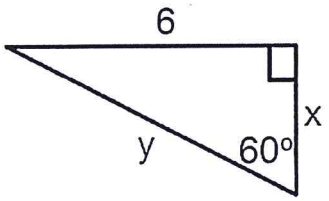
$45° - 45° - 90°$ Right Triangles: Hypotenuse = Leg$\cdot\sqrt{2}$

$30° - 60° - 90°$ Right Triangles: Short Leg = $\frac{1}{2}$ $\cdot$Hypotenuse and Long Leg = Short Leg$\cdot\sqrt{3}$

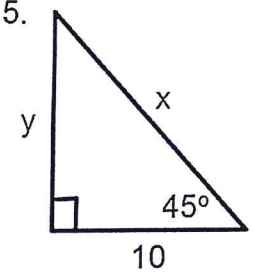
3.



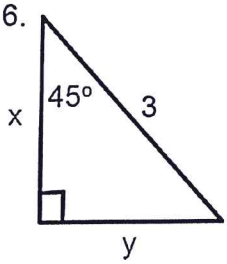
4.



5.



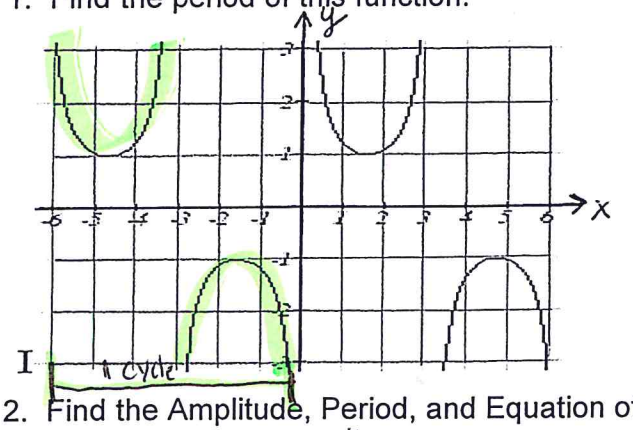
6.



Algebra 2 Bellwork Tuesday, May 3, 2016

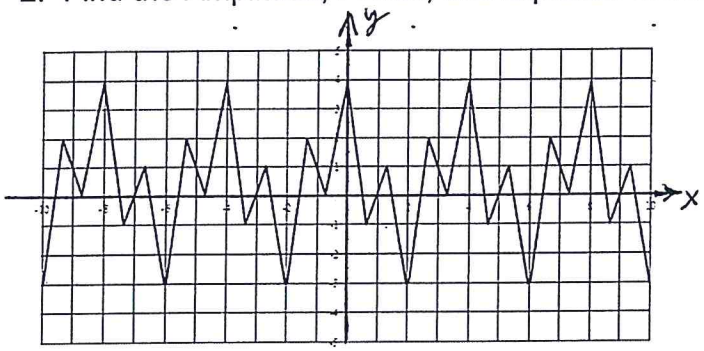
ANSWERS

1. Find the period of this function:



PERIOD = 6

2. Find the Amplitude, Period, and Equation of the Midline for this periodic function.



Amplitude = 3.5

period = 4

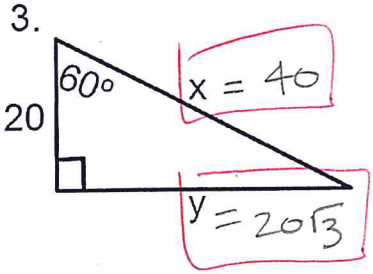
Eq. of Midline: $y = 0.5$

Use the following relationships in Special Right Triangles to find the exact value of each missing side. Make sure you rationalize denominators when needed.

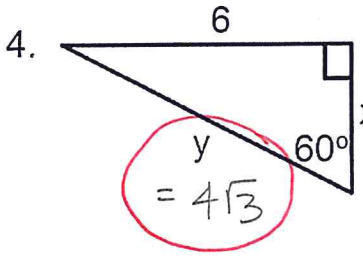
$45° - 45° - 90°$ Right Triangles: Hypotenuse = Leg $\cdot \sqrt{2}$

$30° - 60° - 90°$ Right Triangles: Short Leg = $\frac{1}{2}$ $\cdot$ Hypotenuse and Long Leg = Short Leg $\cdot \sqrt{3}$

3.



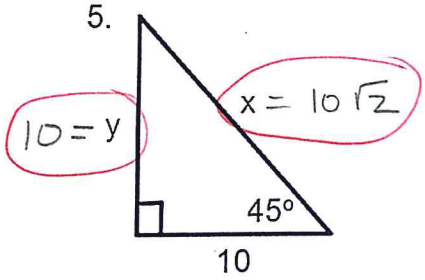
4.



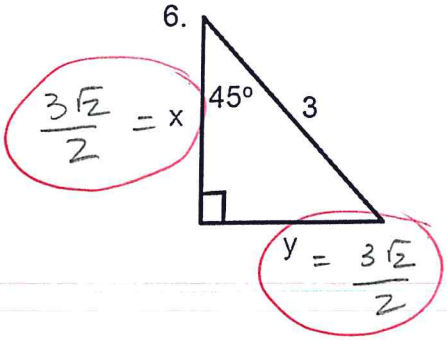
$x = \frac{6}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{6\sqrt{3}}{3}$

$= 2\sqrt{3}$

5.



6.



$x \& y = \frac{3}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}}$

$= \frac{3\sqrt{2}}{2}$