

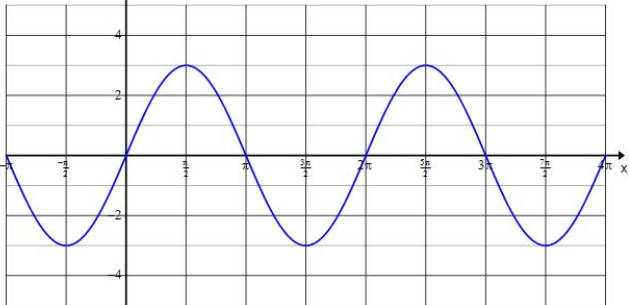
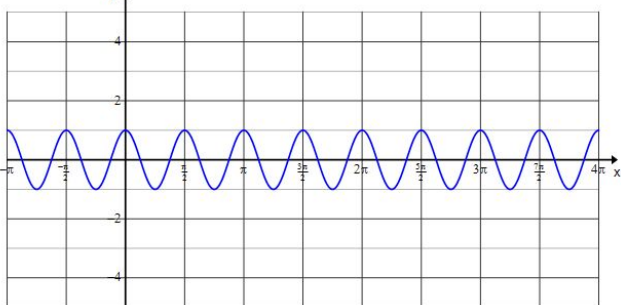
Name: _____

Class Period: _____

SM3

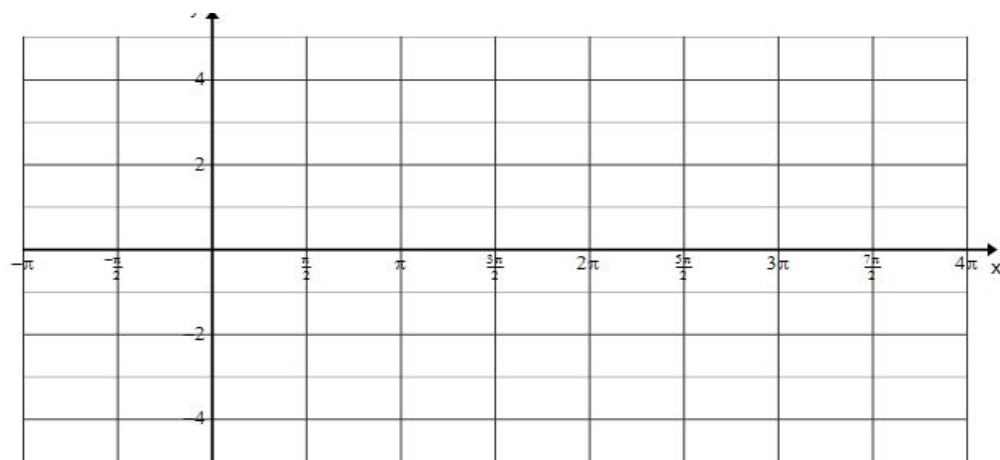
Worksheet 6.A ~ Sine and Cosine Graphs

Problems 1-2: Write the equation of the following graph. State the amplitude and period length.

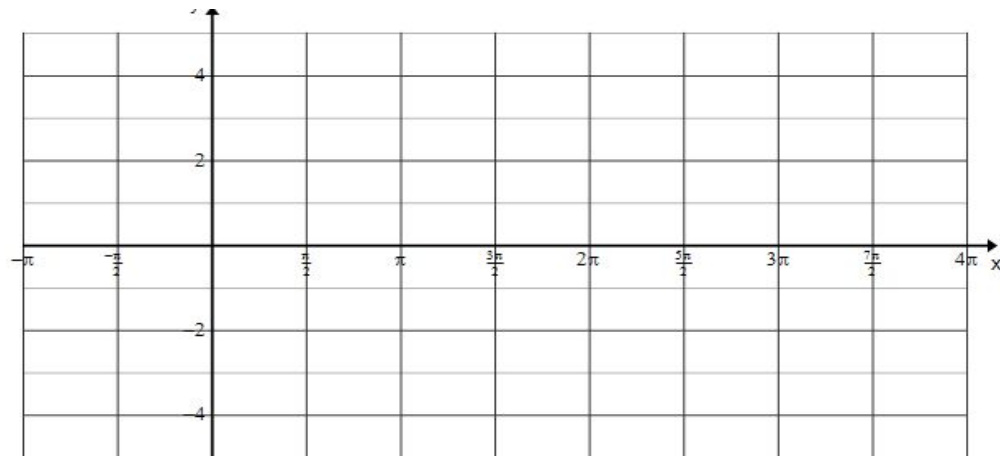
<p>1. amp=_____ period=_____</p> <p>Equation: _____</p> 	<p>2. amp=_____ period=_____</p> <p>Equation: _____</p> 
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For problems 3-7: State the amplitude and period. Sketch the wave from left to right of graph.

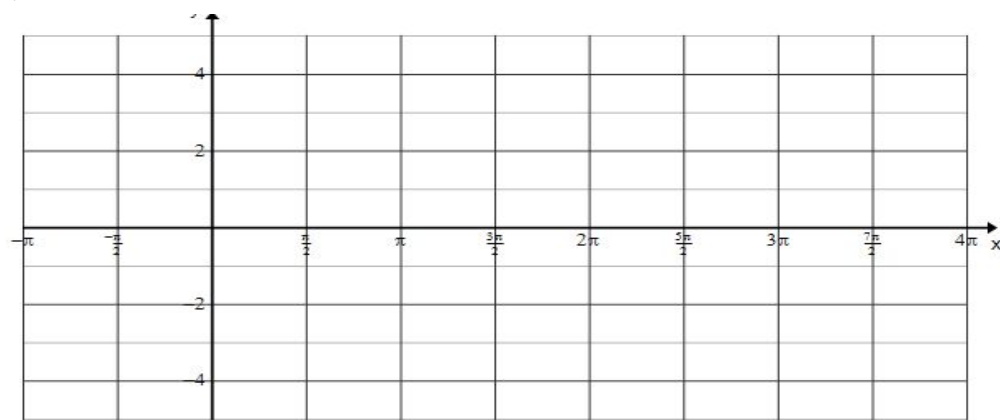
3. $y = 3\sin 2\theta$



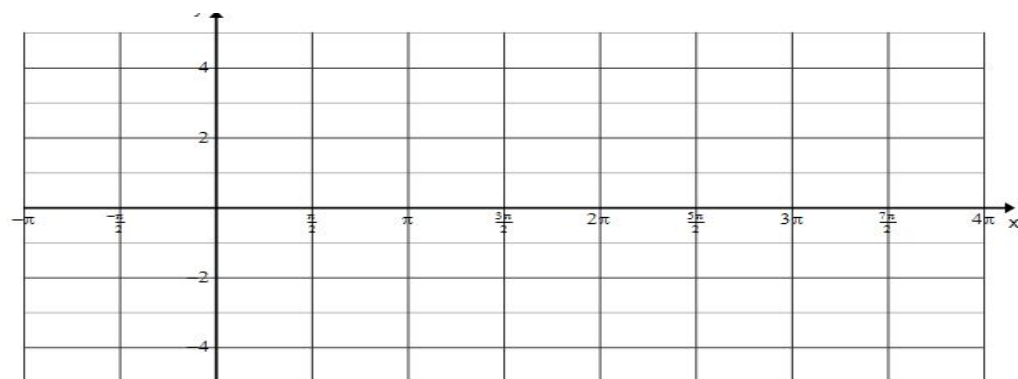
4. $y = 4\cos \frac{\theta}{2}$



5. $y = -\cos 4\theta$

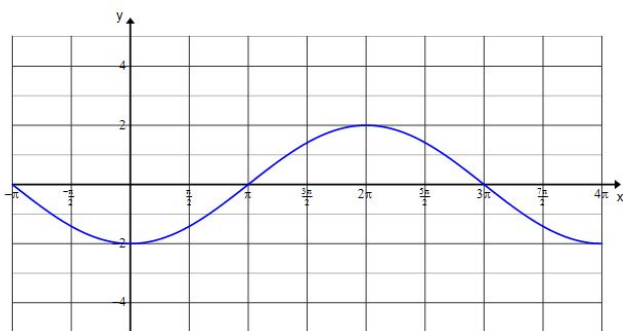


6. $y = 2\sin 3\theta$

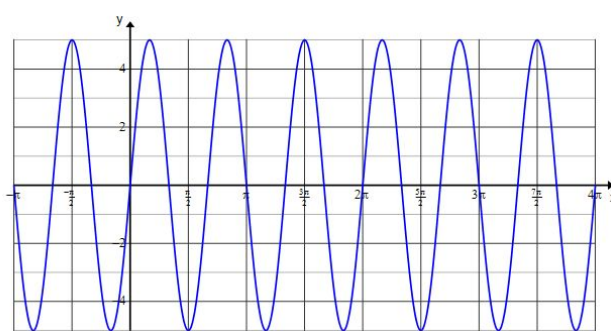


Problems 7-10: Write the equation of the graph: State the amplitude and period length.

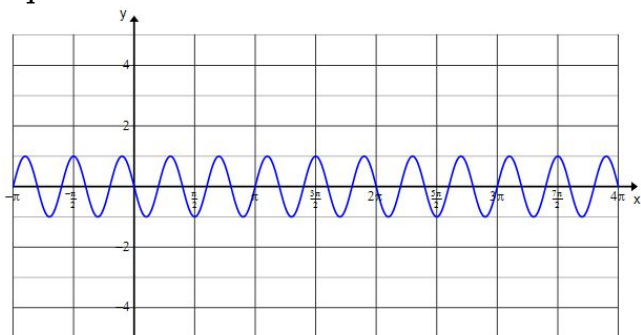
7. amp=_____ period=_____
Equation:



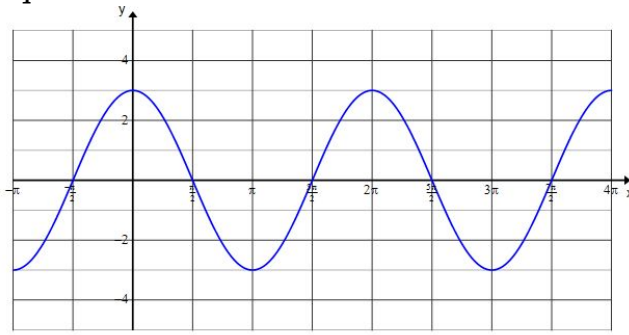
8. amp=_____ period=_____
Equation:



9. amp=_____ period=_____
Equation:



10. amp=_____ period=_____
Equation:



Review!

11. Given $\theta = 7\pi/6$, find the values of all 6 trig functions.

12. Given the $\sin\theta = -4/5$ and $\tan\theta > 0$, find $\sec\theta$.

(Hint: what quadrant are you in?)

13. Your dad wants to build a zipline from a tree at the top of the cliff on your property line down to the hayloft door in your barn, the top of which is twenty feet above the ground. If the tree is 57 feet above the ground, and the angle of depression from the tree to the loft door is 17° , how long will the zipline be? Draw and label a picture of the situation, and answer the question.