13.1-13.5

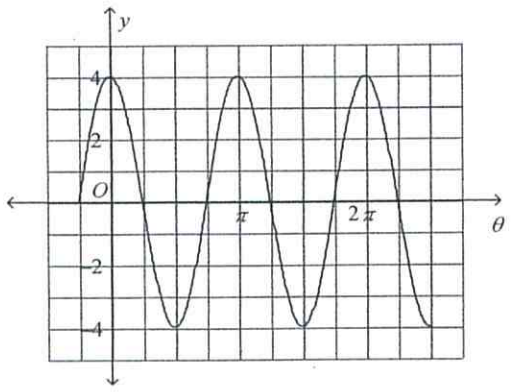
Algebra 2 Test ~~13.4-13.6~~ Review **Show Work on Separate Paper**

Graph one cycle of the function.

1. $y = 4\cos\frac{1}{6}\theta$

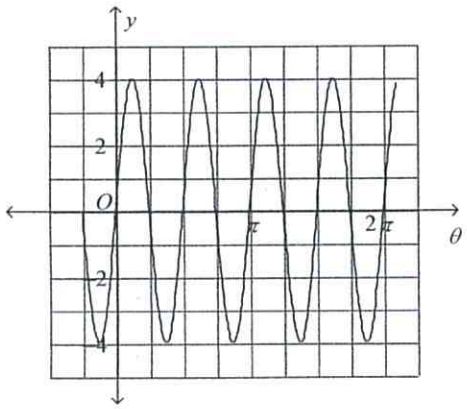
2. Write an equation of the cosine function with amplitude 2 and period $\frac{4\pi}{3}$.

3. Write a cosine function for the graph.



4. Find the period, range, and amplitude of the cosine function y = 3cos 8t.

5. Write the equation for the sine function shown below.



6. **a.** Sketch at least one cycle of a sine curve with amplitude 4 and period of $\frac{\pi}{3}$. Assume $a > 0$.

b. Write an equation for the graph.

7. Sketch one cycle of $y = -2\sin 3\theta$.

8. A particular sound wave can be graphed using the function $y = 3\sin 7x$. Find the amplitude and period of the function.

Find the measure of an angle between 0° and 360° coterminal with each given angle.

9. −100° 10. 372°

Find the exact values of the cosine and sine of each angle. and tangent. Graph ∠, draw + label reference △

11. 45° 12. ~~−225°~~ −120° 13. $\frac{5\pi}{6}$ radians

Write each measure in radians. Express your answer in terms of π.

14. 45° 15. 90°