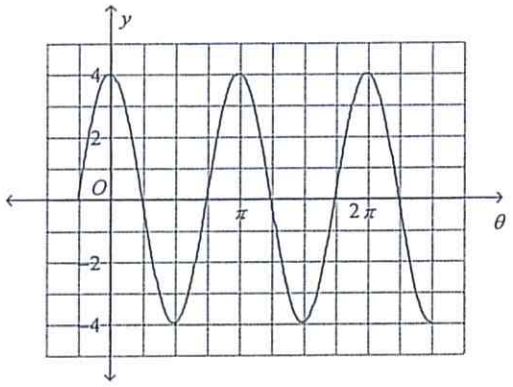
Algebra 2 Test 13.1-13.5 Review Show Work on Separate Paper

Graph one cycle of the function. Show table.

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

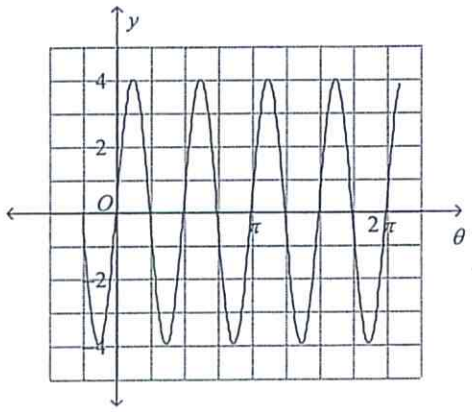
2. Write an equation of the cosine function with amplitude 2 and period $\frac{4\pi}{3}$.

3. **Write a cosine function for the graph.**



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

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



6. Write an equation for the graph of a sine curve with amplitude 4 and period of $\frac{\pi}{3}$. Assume $a > 0$.

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

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. Then find the reference angle.

9. $-100°$ 10. $372°$

Find the exact values of the cos, sin and tan of each angle.

11. $45°$ 12. $-120°$ 13. $150°$ 14. $90°$

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

15. $45°$ 16. $90°$

Write each measure in degrees.

17. $\frac{5\pi}{6}$ 18. $\frac{3\pi}{4}$

Simplify the radicals

19. $\left(\frac{2}{5}\right)^{\frac{1}{2}}$ 20. $\left(\frac{1}{3}\right)^{\frac{3}{6}}$