

Algebra 2 Test 13.1-13.5 Review

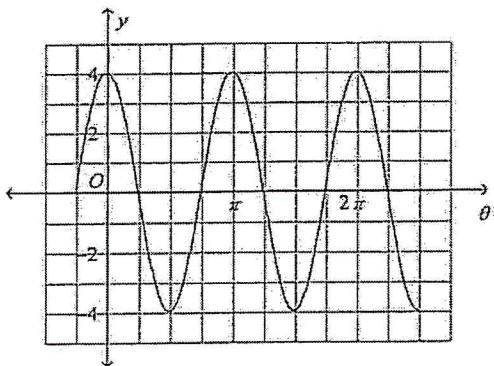
Show Work on Separate Paper

Graph one cycle of the function. Show table.

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

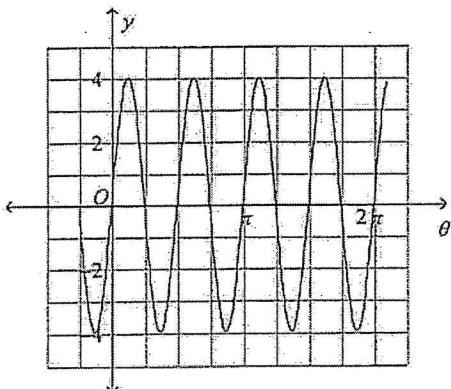
2. Write an equation of the cosine function with amplitude 2 and period $\frac{4\pi}{3}$.

3. Write a cosine function for the graph.



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

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 $a > 0$. *Show work*

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. *Show work*

9. -100° 10. 372°

* *

Find the exact values of the cos, sin and tan of each angle. Draw L. Draw + label reference triangle

11. 45° 12. -120° 13. 150° 14. 90° *Poly*

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

15. 45° 16. 90°

Write each measure in degrees. *Show work*

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

Simplify the radicals

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

21. Graph $y = \frac{5}{2} \tan \frac{1}{4}\theta$

22. Graph $y = -3 \tan 3\pi\theta$

* For all graphs, graph like we did
in notes... make tables, show b/p work,

sin + cos 6 labeled ticks

tan 7 labeled ticks

whether it says graph or sketch