

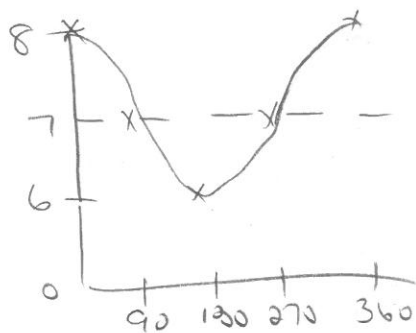
Unit 3 (4.4a)

Vertical Transformations Skills Quiz Practice

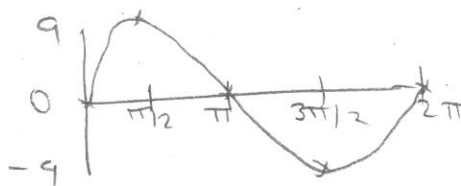
- *Be able to graph $\sin \theta$ and $\cos \theta$.
- *Be able to graph vertical dilations and translations.
- Be able to write an equation from a graph.
- *Be able to write an equation from given information.

Describe the transformations then graph.

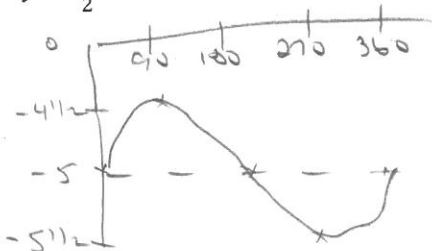
1. $y = \cos \theta + 7$ VT 7



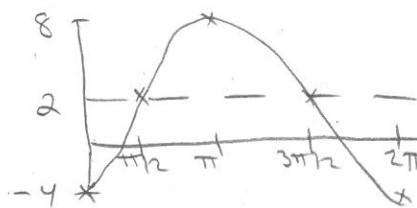
2. $y = 9 \sin x + 0$ VD 9



3. $y = \frac{1}{2} \sin \theta - 5$ VD 1/2 VT -5



4. $y = -6 \cos x + 2$ VD 6 VT 2 Reflection

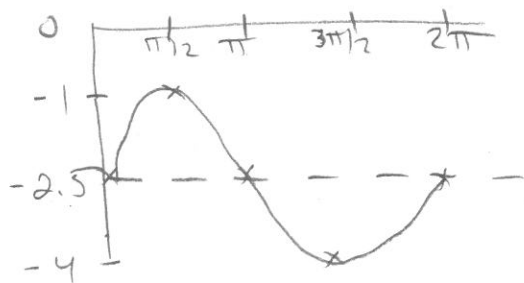


Write the equation then graph:

5. _____

- Sine equation
- In radians
- Vertical dilation (v.d.) of 1.5
- Vertical translation (v.t.) of -2.5

$y = 1.5 \sin x - 2.5$

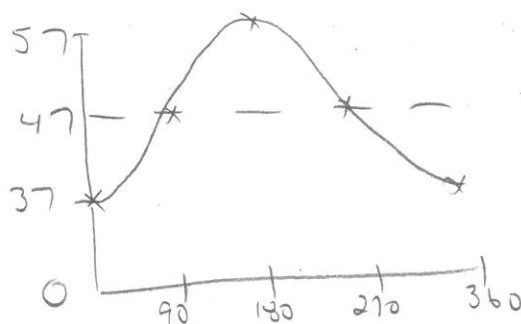


Write the equation then graph:

6. _____

- Cosine equation
- In degrees
- Midline at $y = 47$
- Amplitude of 10
- Reflection

$y = -10 \cos \theta + 47$



Unit 3 (4.4a)

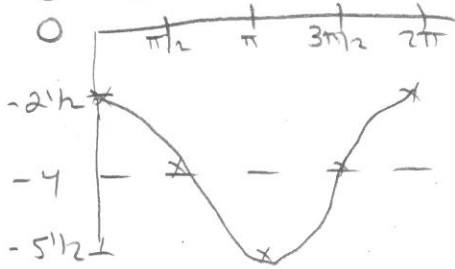
Vertical Transformations Skills Quiz Practice

Write the equation then graph.

7. _____

- Cosine equation
- Amplitude: $\frac{3}{2}$
- Midline: $y = -4$
- In radians

$$y = \frac{3}{2} \cos x - 4$$

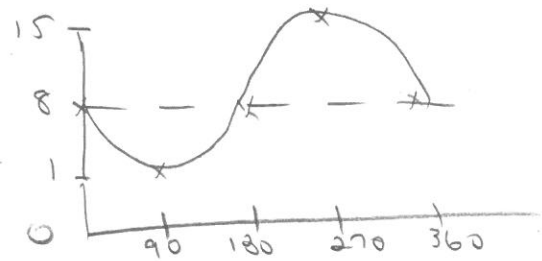


Write the equation then graph.

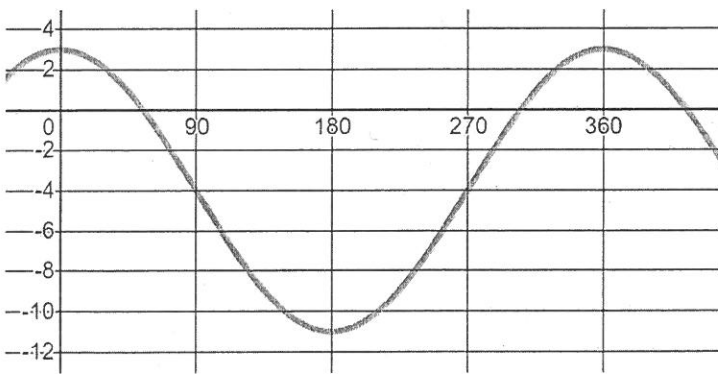
8. _____

- Sine equation
- Vertical translation of 8
- Vertical Dilation of 7
- Reflection
- In degrees

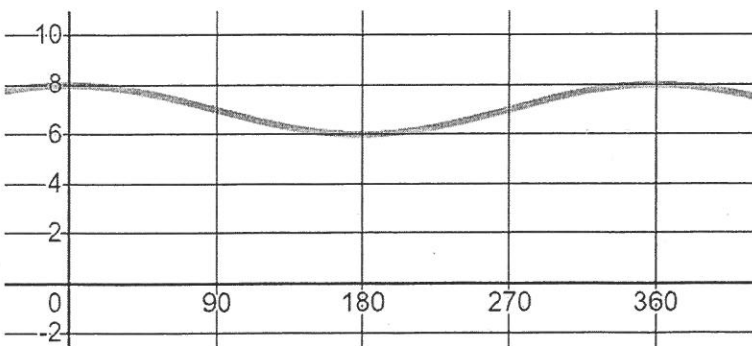
$$y = -7 \sin \theta + 8$$



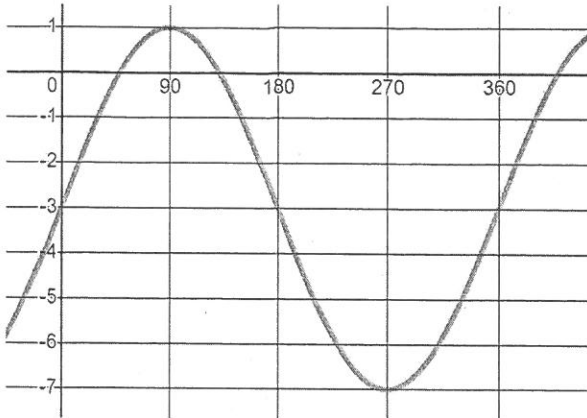
9. Write an equation of the graph. $y = \underline{7 \cos \theta - 4}$



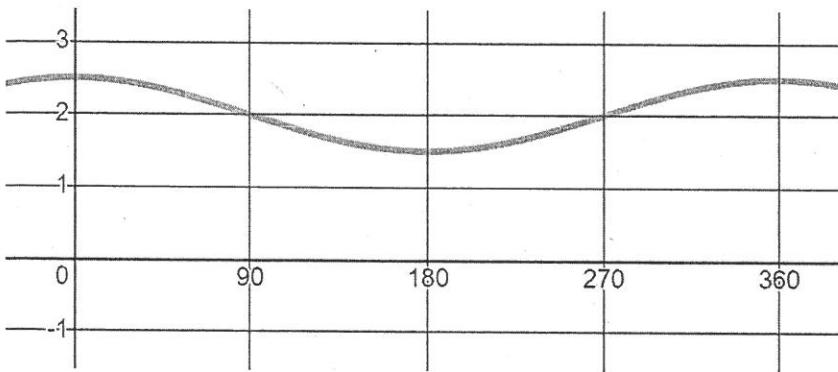
10. Write an equation of the graph. $y = \underline{1 \cos \theta + 7}$



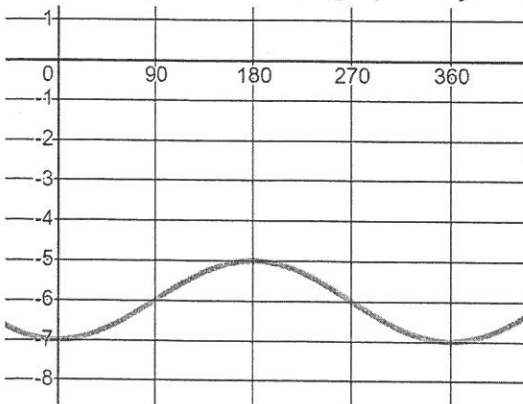
11. Write an equation of the graph. $y =$ $4 \sin \theta - 3$



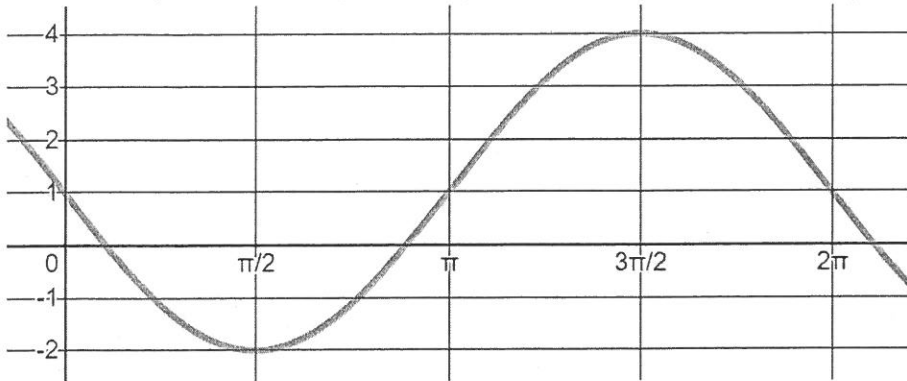
12. Write an equation of the graph. $y =$ $\frac{1}{2} \cos \theta + 2$



13. Write an equation of the graph. $y =$ $-1 \cos \theta - 6$



14. Write an equation of the graph. $y =$ $-3 \sin x + 1$



15. Write an equation of the graph. $y =$ $5 \cos x - 2$

