

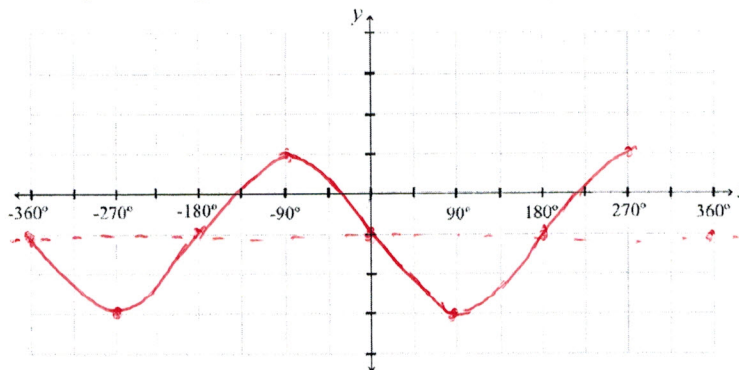
Key

Honors Unit 8 Trig Quiz Review

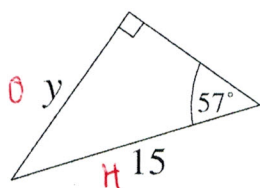
1. Graph $y = -2\sin(x) - 1$ and identify the amplitude and midline of the graph.

Amplitude: 2

Midline: $y = -1$



2. Solve for y in the triangle below.

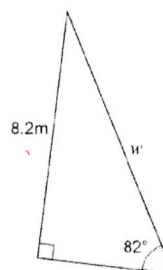


$$\sin 57 = \frac{y}{15}$$

$$y = 15 \sin 57$$

$$y = 12.58$$

3. Solve for w in the triangle below.

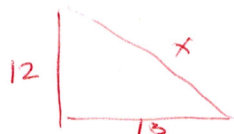


$$\sin 82 = \frac{8.2}{w}$$

$$w = \frac{8.2}{\sin 82}$$

$$w = 8.28$$

4. Find the length of the diagonal of a TV with a length of 12 inches and a width of 13 inches.



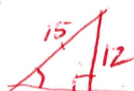
$$12^2 + 13^2 = x^2$$

$$144 + 169 = x^2$$

$$x^2 = 313$$

$$x = 17.69$$

5. A 15 foot ladder is leaning against a wall and reaches 12 feet up the wall. What angle does the ladder make with the ground?

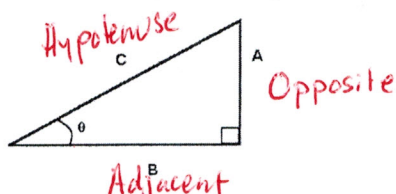


$$\sin x = \frac{12}{15}$$

$$x = \sin^{-1}\left(\frac{12}{15}\right)$$

$$x = 53.1^\circ$$

6. Label the right triangle below with hypotenuse, opposite and adjacent.



7. When a student uses inverse trigonometry to calculate a measure, are they solving for a missing side or a missing angle?

missing angle

8. Write the equation of the following graph on the right.

midline: ~~$y = 3$~~ $y = 3$
 Amplitude 2
 sin functions at $x = 0$ at midline

$$y = 2 \sin x + 3$$

