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

Amplitude: $\qquad$

Midline: $\qquad$

2. Solve for $y$ in the triangle below.

3. Solve for $w$ in the triangle below.

4. Find the length of the diagonal of a TV with a length of 12 inches and a width of 13 inches.
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?
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?
8. Write the equation of the following graph on the right.


