

## Bellwork    Friday, March 21, 2014

1. A triangle has sides of given length: 56, 72, 120

Is this triangle acute, obtuse, or right?

2. Given  $\triangle WAT$  is a right triangle and  $\tan W = \frac{11}{60}$

Find  $\cos W$  and  $\sin W$  as ratios.

3. A fireman uses a 40 foot long ladder to reach a person on the balcony of their apartment. If the person on the balcony sees the fireman at the bottom of the ladder with an angle of depression of  $63^\circ$  find the height of the balcony to the nearest tenth of a foot.

4. A weather balloon is released and since there is no wind it rises straight up. A few moments you see the balloon with an angle of elevation of  $71^\circ$ . If you are 50 feet from where the balloon was released find the height of the balloon to the nearest hundredth of a foot.