## Station 5: TRIANGULATION

You will learn about some of the ways we use Pythagorean Theorem in our everyday lives. Go to our class website and follow the link for station 5.

1. Use the first link to learn about how to use Pythagorean Theorem to find the distance between two points.
2. Watch the $2^{\text {nd }}$ link to answer the questions below and to complete the assignment for this station.

What is Triangulation? $\qquad$
Give one of the most common uses of Triangulation.


Imagine you climbed to the top of this mountain. You became afraid to climb down. The rescuer's need to bring a ladder that will reach you at the top of the mountain. How long will the ladder have to be?

Use a centimeter ruler to find the distance of the two legs of the right triangle. Then apply the Pythagorean Theorem to find the length of the hypotenuse.

Now measure in cm the scale at the bottom of the picture. Use that scale to form a ratio scale to cm to determine how many FEET the ladder will need to be.

Information you will need to know: $\frac{1 \mathrm{in}}{2.54 \mathrm{~cm}} \quad \frac{12 \mathrm{in}}{1 \mathrm{Ft}}$
These fractions are to be used as ratio to make your conversions.

