

Make-Your-Own Triangles Game - Handout

Directions:

1. Cut out all cards and then spread them out, face down.
2. Select three cards at random.
3. Write them into corresponding places in the table below, across one row.
 - If you select angles measured in degrees, place them into any “Angle Measures” columns.
 - If you select side lengths measured in cm, place them into any “Side Lengths” columns.
4. Predict and test if you can create no triangles, 1 or 2 unique triangles, or many triangles from those measurements.
5. Fill out the rest of that row, showing or explaining your reasoning.
6. Repeat the process for a new set of 3 cards in the next row of the table.

Angle Measures			Side Lengths			How many unique triangles? (None, 1, 2, or many) Show or explain.
$\angle A$	$\angle B$	$\angle C$	$\overline{AB}$	$\overline{AC}$	$\overline{BC}$	

Make-Your-Own Triangles Game - Cards

2 cm	2 cm	3 cm	3 cm
4 cm	4 cm	5 cm	5 cm
6 cm	6 cm	6 cm	6 cm
90°	90°	120°	120°
30°	30°	45°	45°
15°	60°	60°	60°