

Triangle Angle-Sum Worksheet

Name _____

Date _____ Hour _____

Materials: protractor and/or ruler

Directions:

1. Use the space below to draw three different triangles. Label the angles of each triangle 1, 2, and 3.
2. Measure angles 1, 2, and 3 for each triangle.
3. Write the measures of each triangle in the spaces provided and find the sum of the angles.

Triangle 1

Draw any $\triangle$ and measure $\angle$'s w/ protractor

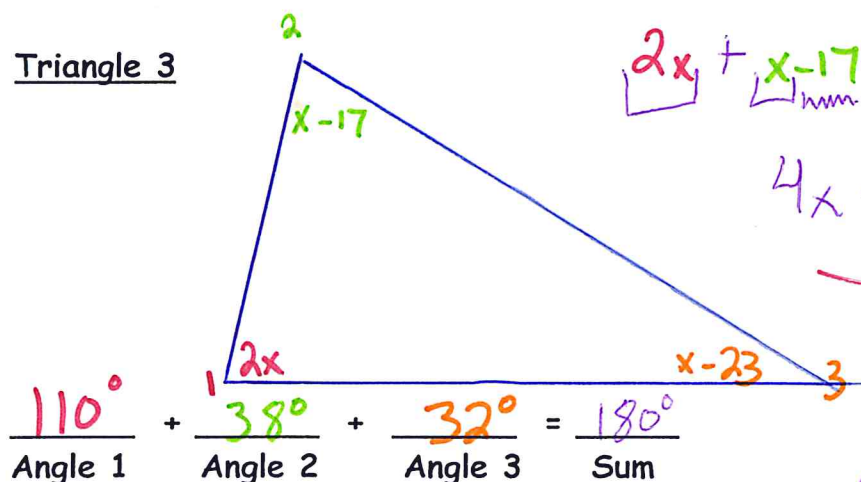
$$\frac{\text{Angle 1}}{\text{Angle 1}} + \frac{\text{Angle 2}}{\text{Angle 2}} + \frac{\text{Angle 3}}{\text{Angle 3}} = \frac{\text{Sum}}{\text{Sum}}$$

Triangle 2

Construct a $\triangle$ with $m\angle 1 = 55^\circ$ and $m\angle 2 = 60^\circ$ then measure $\angle 3$ and add.

$$\frac{55^\circ}{\text{Angle 1}} + \frac{60^\circ}{\text{Angle 2}} + \frac{\text{Angle 3}}{\text{Angle 3}} = \frac{\text{Sum}}{\text{Sum}}$$

Triangle 3



$$2x + x - 17 + x - 23 = 180$$

$$4x - 40 = 180$$

$$+40 \quad +40$$

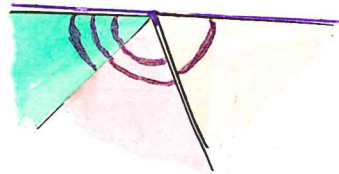
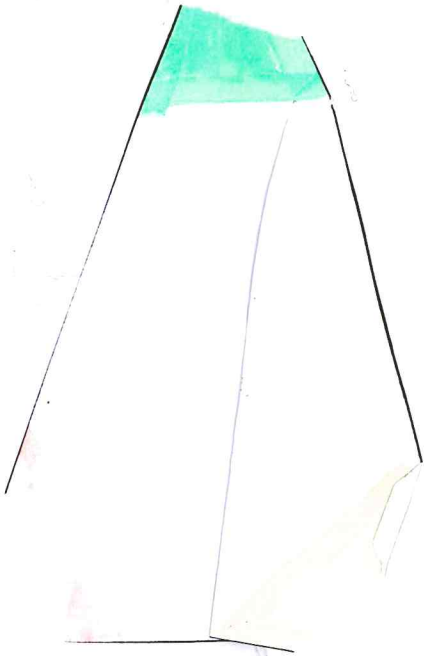
$$4x = 220$$

$$\frac{4x}{4} = \frac{220}{4}$$

$$x = 55$$

****Make a conjecture about the sum of the angles of any triangle.**

All 3 corners together
form a line.



We know there
are 180° in
a line.

Therefore, all 3
angles add to 180°
 180° in every Δ .

