

Math Message

- 1 Work with a partner.
 - a. Cut apart one set of triangle cards from *Math Masters*, page 212.
 - b. Circle how you will sort the triangles: By side length By angle measure
 - c. Sort the triangle cards into 3 piles according to your chosen attribute (sides or angles).
 - d. For each group, list the triangles that belong in the group and briefly describe the rule for the group.

Group 1 Rule: _____

Triangles: _____

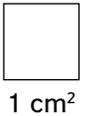
Group 2 Rule: _____

Triangles: _____

Group 3 Rule: _____

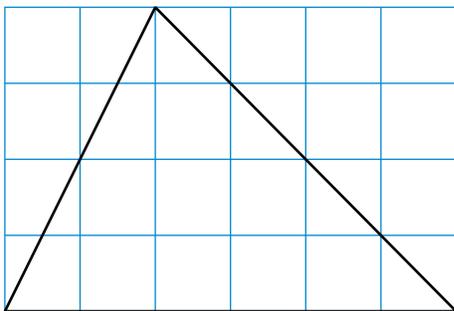
Triangles: _____

- 2 Cut out Triangles A and B from *Math Masters*, page 213.
DO NOT CUT OUT THE TRIANGLE BELOW.
Tape Triangles A and B together to form a parallelogram.



Triangle A

Tape your parallelogram in the space below.



Base = _____

Base = _____

Height = _____

Height = _____

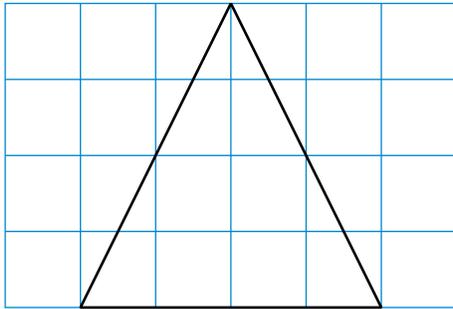
Area of triangle = _____

Area of parallelogram = _____

- 3 Cut out Triangles C and D from *Math Masters*, page 213.
 Draw a line segment to indicate the height of Triangle C below.
 Tape Triangles C and D together to form a parallelogram.

Triangle C

Tape your parallelogram in the space below.



Base = _____

Base = _____

Height = _____

Height = _____

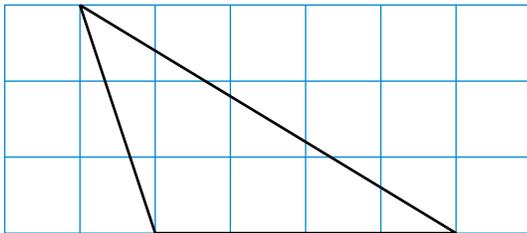
Area of triangle = _____

Area of parallelogram = _____

- 4 Cut out Triangles E and F from *Math Masters*, page 213.
 Draw a line segment to indicate the height of Triangle E below.
 Tape Triangles E and F together to form a parallelogram.

Triangle E

Tape your parallelogram in the space below.



Base = _____

Base = _____

Height = _____

Height = _____

Area of triangle = _____

Area of parallelogram = _____

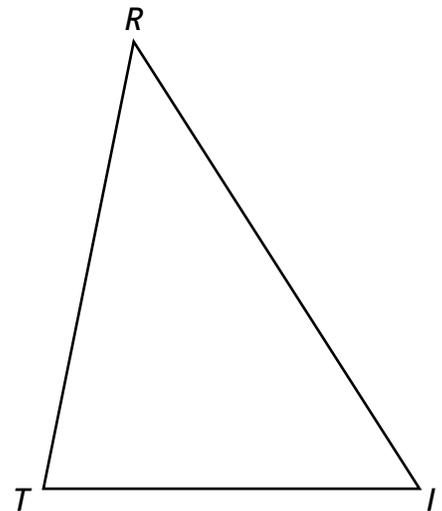
- 5 Look for patterns in Problems 2–4. Use the patterns you find to write a formula for the area of a triangle. Be sure to define your variables.

Use triangle TRI for Problems 6–7.

- 6 Measure and label one base and one height for triangle TRI . Measure to the nearest tenth of a centimeter. Use your formula to calculate the approximate area for triangle TRI .

Number sentence: _____

Approximate area of triangle TRI : _____



- 7 a. Label the other bases and heights for triangle TRI . Measure each base and height to the nearest tenth of a centimeter. Complete the table with approximate measurements and calculated areas.

Side Used as Base	Base (cm)	Height (cm)	Area of Triangle (cm ²)
TI			
TR			
RI			

- b. The areas you found in Part a should be about the same. What might cause the variation in your calculated areas?
