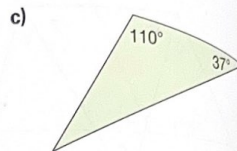
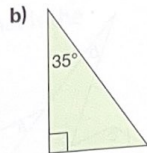
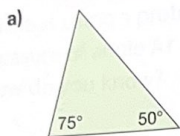


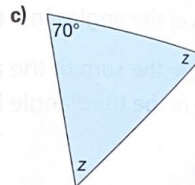
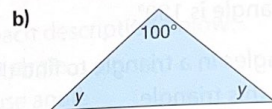
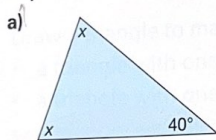
Practice

1. Draw 3 different triangles on dot paper. Measure and record each angle. Find the sum of the measures of the angles for each triangle.

2. Determine the measure of the third angle without measuring.



3. The two unknown angles in each triangle below are equal. Determine the measure of each unknown angle without measuring. Explain the strategy you used.



4. Two angles of a triangle are given. Find the measure of the third angle.

- a) $55^\circ, 105^\circ$ b) $45^\circ, 90^\circ$
c) $30^\circ, 60^\circ$ d) $25^\circ, 125^\circ$

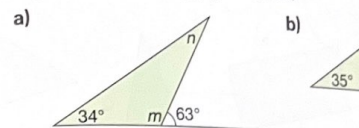
5. Vegreville, Alberta, is home to the world's largest known Ukrainian egg. It has 1108 triangular pieces with three angles of equal measure. Find the measure of each angle. Explain your strategy.

6. Is it possible for a triangle to have:
 - a) more than 1 obtuse angle?
 - b) 2 right angles?
 - c) 3 acute angles?
 Explain your thinking.
Use pictures and words.

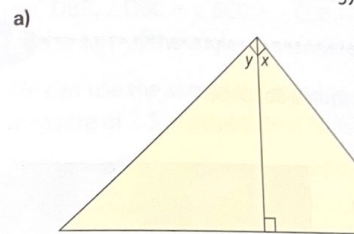


7. Find the measure of the third angle i described below. Then, draw the tri Explain how you found each measur
 - a) A triangle with two angles measu
 - b) A triangle with two equal angles;
 - c) A right triangle with a 70° angle

8. Find the measures of the angles labelle Explain the strategy you used.



9. Find the measures of the angles labell Show your work. Explain the strategy



10. Use a geoboard and geobands or sc Construct $\triangle ABC$.
 - a) Find the unknown angle measu Check your answers by measurir
 - b) Extend AB 1 unit right to D. Extend AC 1 unit down to E. Joir
 - c) Predict the measure of each an Use a protractor to check. Recor
 - d) Repeat steps b and c two more
 - e) What do you notice about all th

Reflect

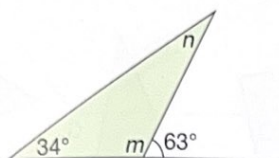
Suppose your classmate missed t Explain how you know the sum o



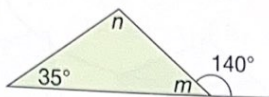
7. Find the measure of the third angle in each triangle described below. Then, draw the triangle. Explain how you found each measure.
- A triangle with two angles measuring 65° and 55°
 - A triangle with two equal angles; each measures 40°
 - A right triangle with a 70° angle

8. Find the measures of the angles labelled m and n . Explain the strategy you used.

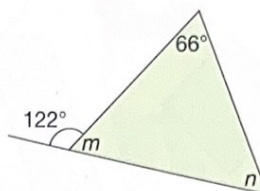
a)



b)

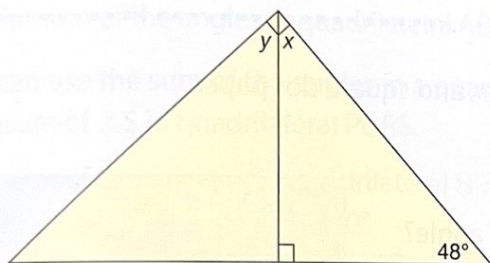


c)

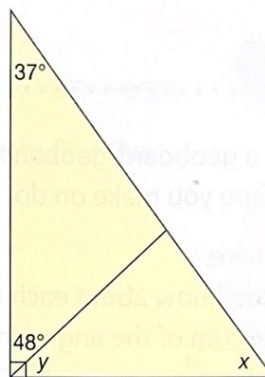


9. Find the measures of the angles labelled x and y . Show your work. Explain the strategy you used.

a)



b)



10. Use a geoboard and geobands or square dot paper.

Construct $\triangle ABC$.

- a) Find the unknown angle measures.

Check your answers by measuring with a protractor.

- b) Extend AB 1 unit right to D .

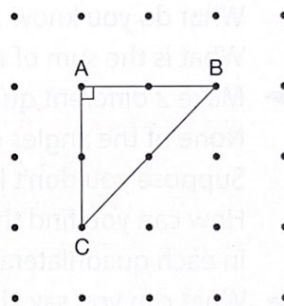
Extend AC 1 unit down to E . Join DE .

- c) Predict the measure of each angle in the new triangle.

Use a protractor to check. Record your work.

- d) Repeat steps b and c two more times.

- e) What do you notice about all the triangles you created? Explain.



Reflect

Suppose your classmate missed today's lesson.

Explain how you know the sum of the angles in any triangle.