

4. Construct $\triangle FGH$ with $\angle HFG = 50^\circ$, $\angle FGH = 60^\circ$, and $\angle GHF = 70^\circ$. Compare your triangle with that of another student. Are the triangles congruent? How do you know?

Classify each triangle by sides and by angles. How do you know? In each case, how many different triangles are possible?

- c) $\triangle LMN$ with two sides 7 cm long and one side 4 cm long
- b) $\triangle CDE$ with all sides 65 mm long
- a) $\triangle PQR$ with side lengths $PQ = 6$ cm, $QR = 8$ cm, and $PR = 10$ cm

3. Use a ruler and a compass to construct each triangle:

- a) $\triangle PQR$ with side lengths $PQ = 6$ cm, $QR = 8$ cm, and $PR = 10$ cm
- b) Use a ruler and a protractor to construct the quadrilateral from part a.

Trace the quadrilateral. Measure and record the side lengths and the angles.

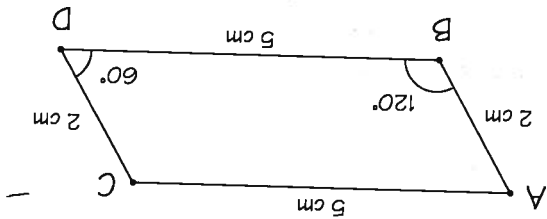
a) Arrange 3 tans to form a quadrilateral.

2. You will need a tangram.

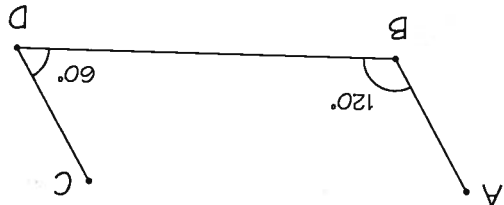
1. Use a ruler and a protractor. Construct square PQRS with side length 8 cm.

Practice

Step 4
Draw line segment AC to complete the parallelogram. Label each measure. Check that AC is 5 cm long.



Step 3
Use the protractor to measure 60° at D. Draw segment DC 2 cm long.



Step 2
At B, use the protractor to measure 120° . Draw segment BA 2 cm long.

