

M9

Similar Triangles – Part 2

6.4

- Similar triangles have all three corresponding angles congruent
- Similar triangles have all three pairs of corresponding sides scaled by the same factor.

For triangles ABC and KLM to be similar, the following has to be true:

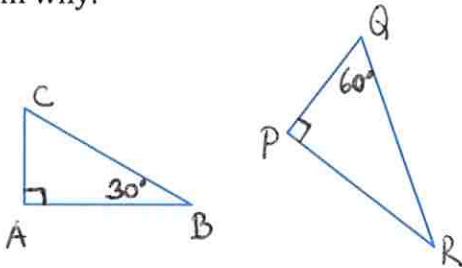
$$\angle A \cong \angle K \text{ and } \angle B \cong \angle L \text{ and } \angle C \cong \angle M$$

AND

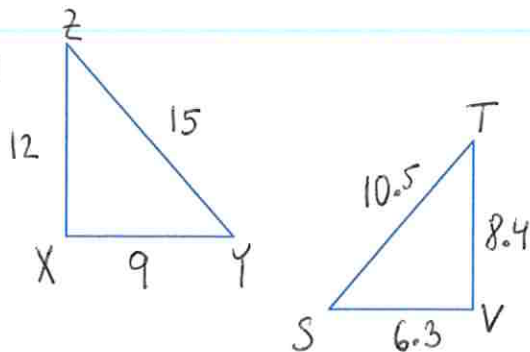
$$\frac{KL}{AB} = \frac{LM}{BC} = \frac{KM}{AC} = SF$$

Example 1: Determine whether the given triangles are similar. If they are similar, explain why.

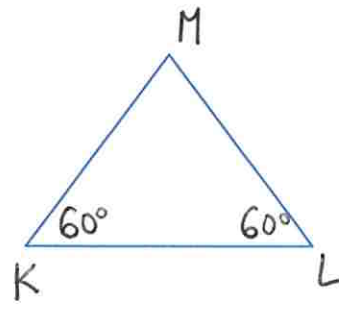
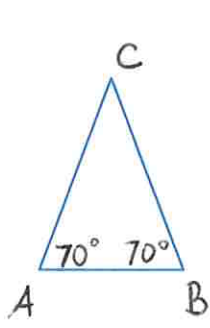
a)



b)



c)



d)

