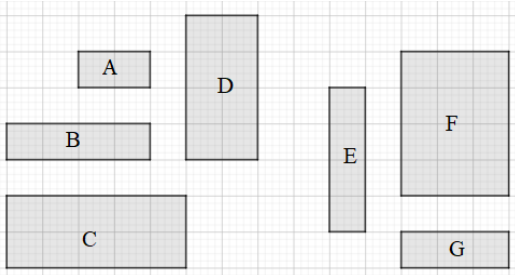


Congruent Triangles – www.m4ths.com

(1) Explain the difference between similar shapes and congruent shapes.

(2) In the diagram below pick:

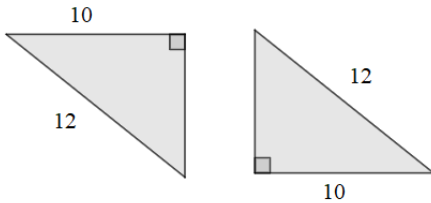
- (a) Two rectangles which are congruent.
- (b) Two rectangles that are similar.



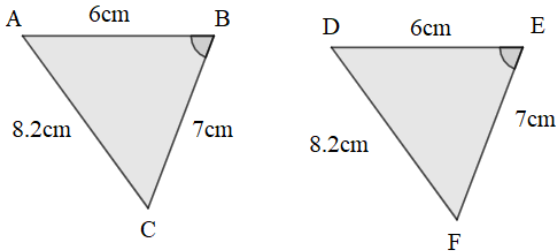
(3) Which 2 of the following **don't** prove congruency?

- ASA SAS RHS ASS AAA SSS

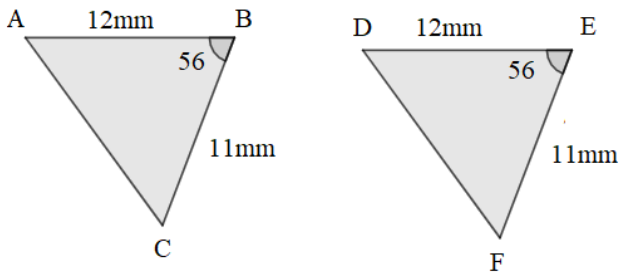
(4) Which proof could you use to show the triangles below are congruent?



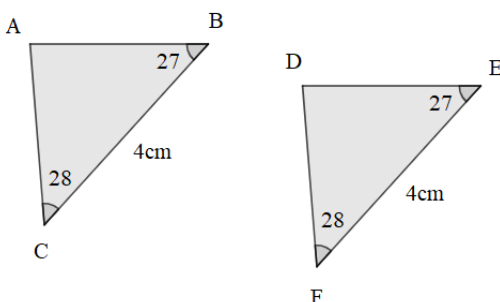
(5) Prove that the two triangles below are congruent.



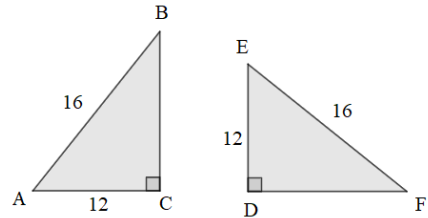
(6) Prove that $\triangle ABC$ and $\triangle DEF$ are congruent.



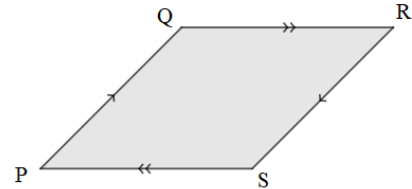
(7) Prove that $\triangle ABC$ and $\triangle DEF$ are congruent.



(8) Prove that $\triangle ABC$ and $\triangle DEF$ are congruent.



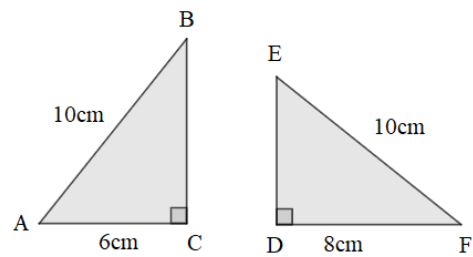
(9) The diagram below shows parallelogram PQRS. Prove that $\triangle PQR$ and $\triangle PSR$ are congruent.



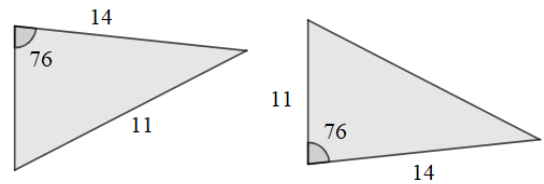
(10) Fred has two equilateral triangles drawn on a piece of paper. Which one of the statements below is correct?

- (a) The two triangles **MUST** be congruent.
- (b) The two triangles are neither congruent or similar.
- (c) The two triangles are similar.

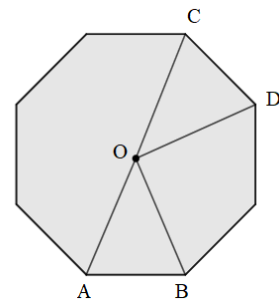
(11) Use Pythagoras Theorem to prove to that $\triangle ABC$ and $\triangle DEF$ are congruent.



(12) Explain why the two triangles below are not congruent?



(13) The diagram below shows a regular octagon with centre O. Prove to that $\triangle AOB$ and $\triangle COD$ are congruent.



(14) Explain why AAA doesn't prove congruency but does prove similarity.

(15) Why is it important not to use ASS in a proof?