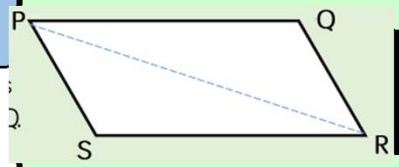
Year 10 Mathematics Learning Journey: Unit 2 - Congruence, Similarity and Enlargement

Step 14 (H): Prove triangles are congruent

Prove that triangle PRS is congruent to triangle RPQ.



Step 13: Conditions for congruent triangles

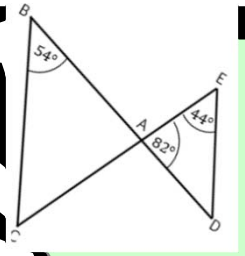
Does it matter which two angles and sides are given for the angle-side-angle condition to be true?

Step 12: Congruence and similarity

If you know two shapes are congruent, what else do you know about the shapes?

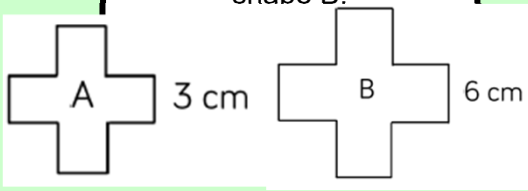
Step 7: Establish triangles are similar

Is triangle ABC similar to ADE?



Steps 8 & 9 (H): Areas of similar shapes

The area of shape A is 45cm^2. Find the area of shape B.

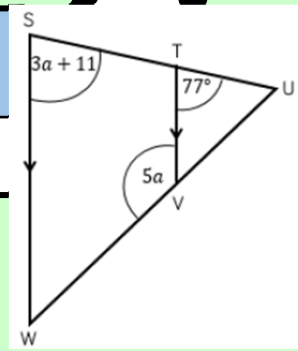


Step 10 (H): Volumes of similar shapes

If you know the length scale factor between two similar shapes, how can you find the volume scale factor?

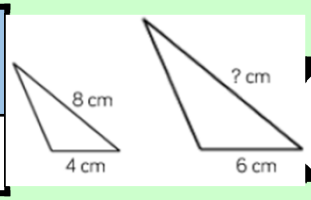
Step 11 (H): Similar shape problems

Find angle SWV.



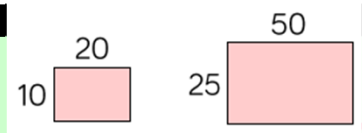
Step 5: Calculating sides and angles in similar shapes

Calculate the missing length.



Step 4: Identify similar shapes

Explain how you know these two shapes are similar?



Step 3 (H): Negative scale factors

How would a shape change if it was enlarged by a negative fractional scale factor, e.g. ½ ?

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