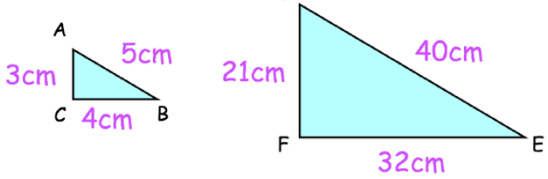
Year 11 Mathematics Learning Journey: Unit 5 - Geometry

Step 9: Conditions for congruence

What is the minimum information needed for triangles to be congruent?

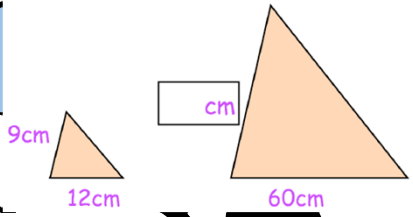
Step 8: Establish if triangles are similar

Explain why these two shapes are **not** similar.



Step 7: Missing sides and angles in similar shapes

Calculate the missing length in the similar shape.



Step 6: Similar and congruent shapes

Explain the difference between similar and congruent shapes.

Step 5: Addition and subtraction of vectors

Given $\mathbf{a} = \begin{pmatrix} 2 \\ 7 \end{pmatrix}$ and $\mathbf{b} = \begin{pmatrix} 1 \\ 4 \end{pmatrix}$ work out $2\mathbf{a} + \mathbf{b}$ as a column vector.

Step 4: Vectors multiplied by a scalar

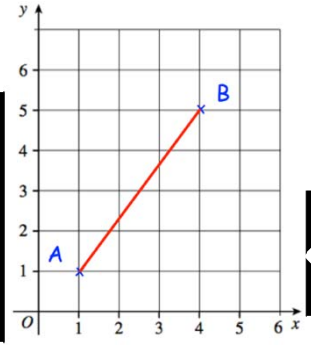
Are the vectors $\begin{pmatrix} 4 \\ -2 \end{pmatrix}$ and $\begin{pmatrix} 8 \\ -2 \end{pmatrix}$ parallel?

Step 3: Vector notation

The vector $\mathbf{a} = \begin{pmatrix} 1 \\ 2 \end{pmatrix}$. Draw the vector $3\mathbf{a}$.

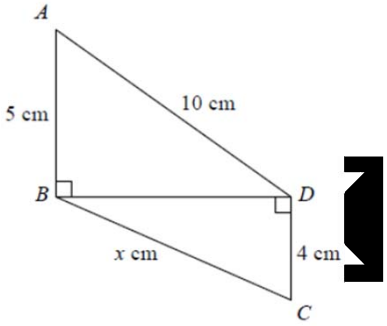
Step 2: Pythagoras and trigonometry in context

Calculate the length of the line joining the points A and B.



Step 1: Pythagoras and trigonometry

Triangles ABD and BCD are right-angled triangles. Work out the value of x.



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