

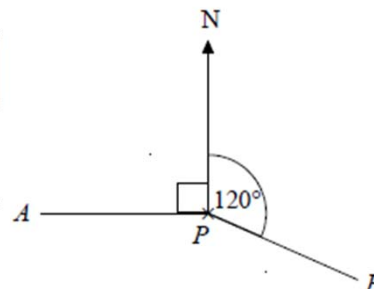
Year 11 Mathematics Learning Journey: Unit 7 - Transformations and Constructions

Step 10: Loci

When drawing locus from a line, what shape will the locus form?

Step 9: Bearings

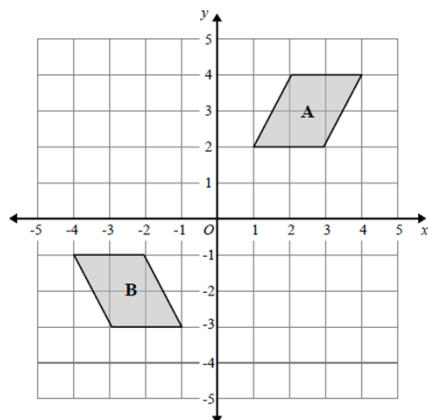
Write down the bearing of
a) B from P b) A from P



Step 8: Perpendicular from a point

Use a ruler and compasses to construct the perpendicular from the point P to the line QR.

P
x



Step 5: Combination of transformations

Shape A is transformed to shape B by a reflection in the x-axis followed by a translation $\begin{pmatrix} p \\ q \end{pmatrix}$. Find the value of p and the value of q .

Step 6: Construct triangles

Construct an equilateral triangle with sides of length 5cm.

Step 7: Perpendicular and angle bisectors

Construct a perpendicular bisector to a line.

Step 4: Enlargement

Does enlarging a shape always make it bigger?

Step 3: Translation

What does the column vector $\begin{pmatrix} -5 \\ 1 \end{pmatrix}$ tell us when translating a shape?

Step 2: Rotation

When rotating by 180° , why do we not need to give a direction?

Step 1: Reflection

Plot the lines $x = 1$ and $y = 3$ on a graph.

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