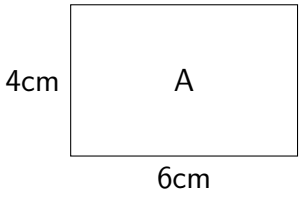
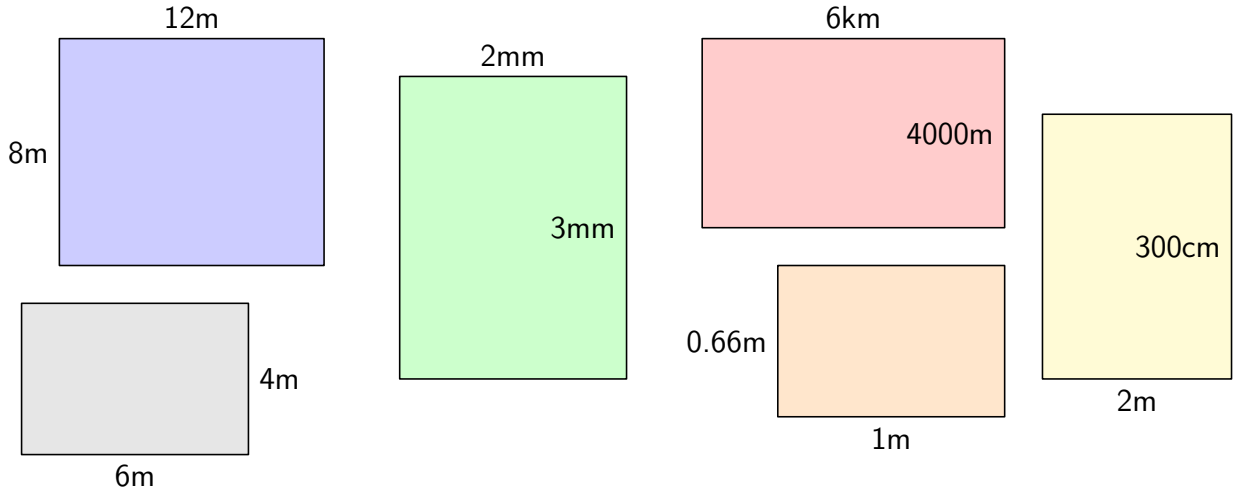
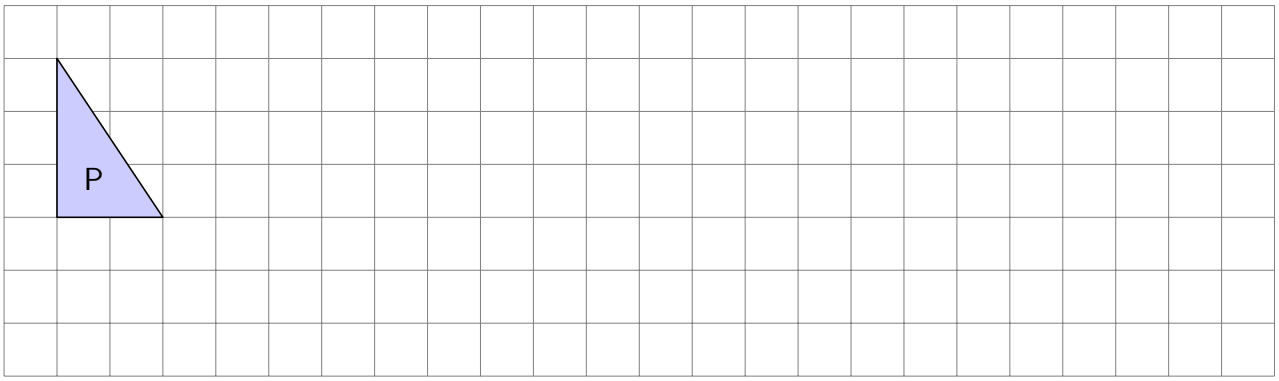
Activity 1.

Tick the rectangles that are similar to A.

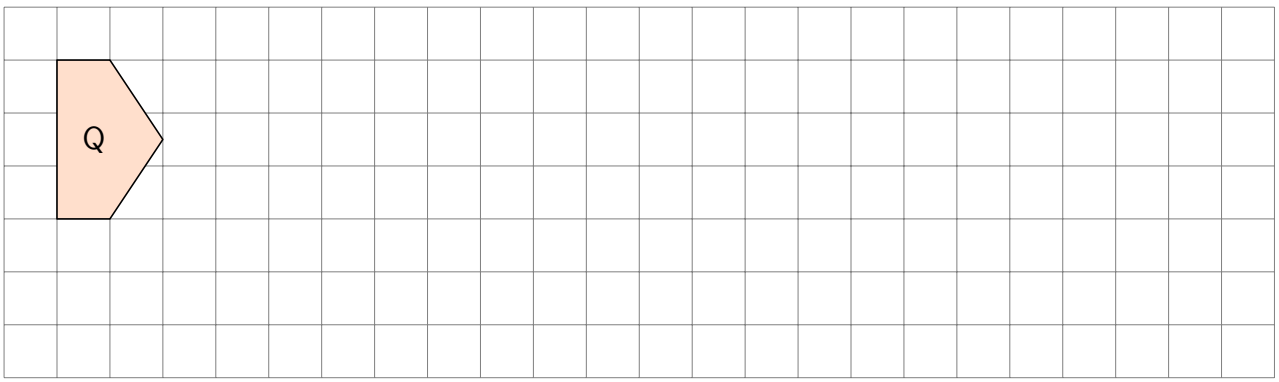




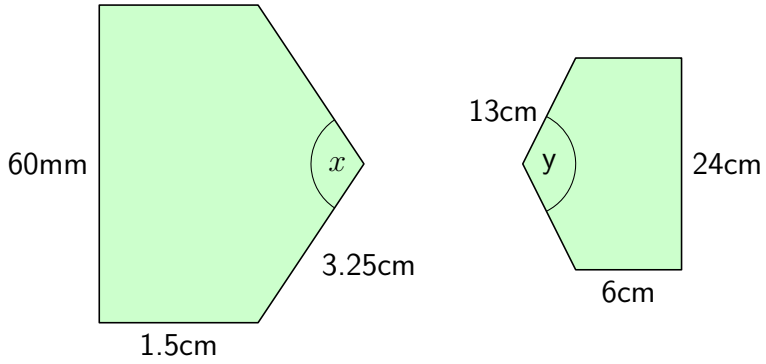
Activity 2. Draw two triangles that are similar to triangle P.



Activity 3. Draw two shapes that are similar to shape Q.



Activity 4. The two shapes below are symmetrical.



Are these shapes similar? If so, explain why. .....

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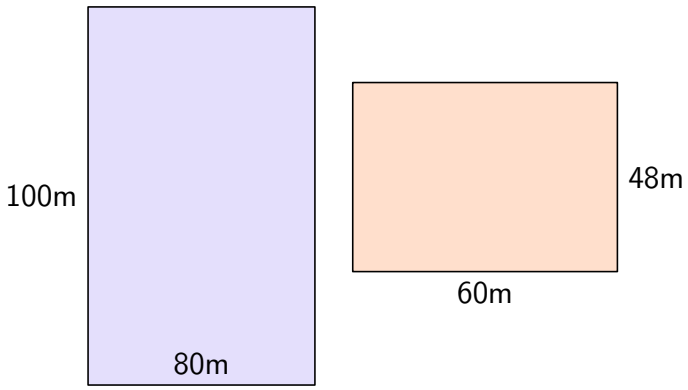
Angle x is 135 degrees. What is the size of angle y? .....

Activity 5. Harold has two shapes and has proven that they are **not** similar. Here are the shapes, along with Harold's workings out.



$$\begin{aligned} \text{base scale factor} &= 80/60 \\ &= 1.333... \\ \text{height scale factor} &= 100/48 \\ &= 2.083... \end{aligned}$$

Explain why Harold is wrong. .....

.....

Activity 6. Triangles that are the same color are similar. Work out all six missing lengths.