

Warm up

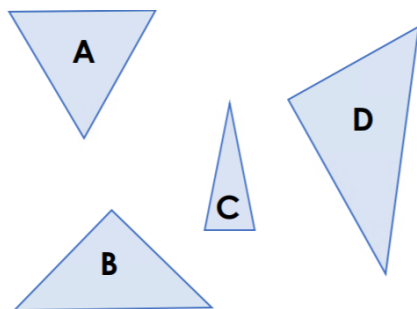
Match each triangle to its type and then draw one of your own. Use a ruler.

Right angled

Scalene

Isosceles

Equilateral



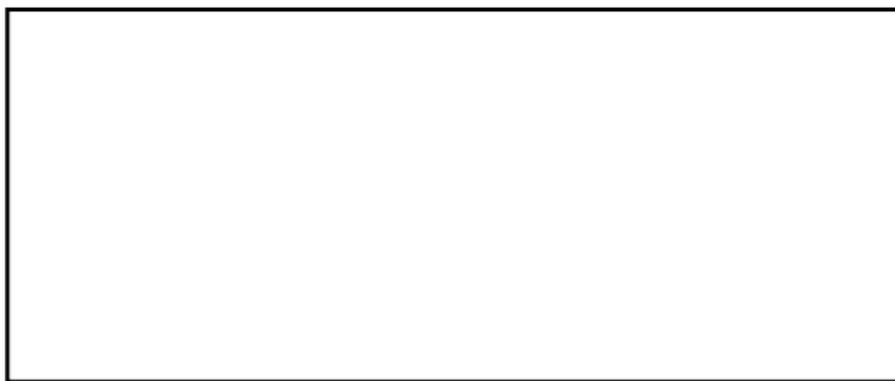
Task 1

The shape below has a total perimeter of 34cm. What would its dimensions be?

Explore the different ways that you could create different types of triangles within the shape below. Your shape must include at least one of each type of triangle (right angled, isosceles, equilateral and scalene) and have a maximum of 6 individual triangles.

Use a ruler to measure your lines accurately.

You can draw this in your book, if you do not have a printer.

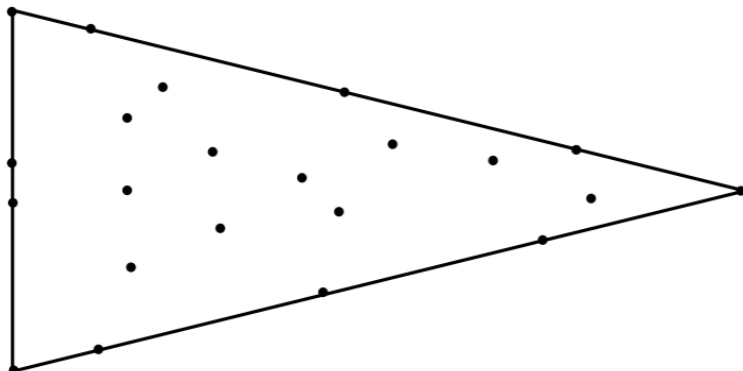


Task 2

Vanessa is designing a flag that must include multiple triangles of different types. Investigate the different designs she could create using the template below by joining the dots to create triangles.



My favourite number is 12 so I don't want my design to have any more than 12 triangles.



How many scalene triangles are included within your design?

Answers

Right angled – none; Scalene: D; Isosceles – B, C; Equilateral – A

How do you know?

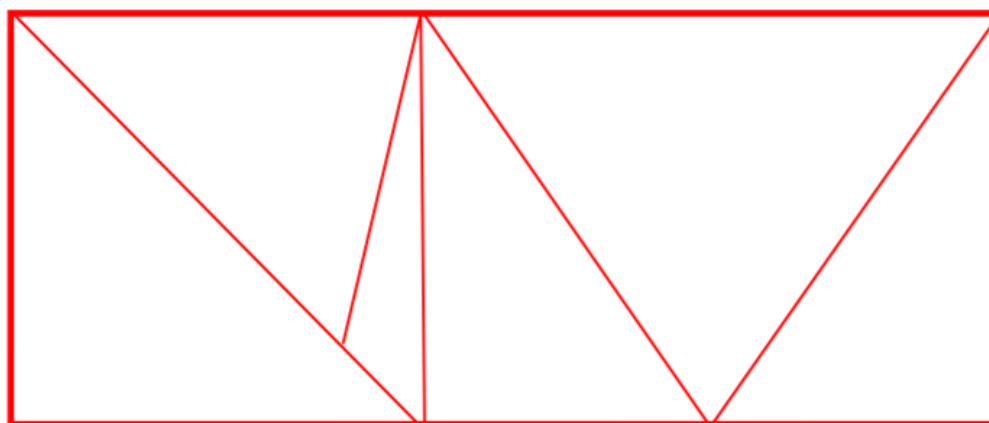
Equilateral triangles have 3 equal sides and 3 equal angles of 60°

Isosceles triangles have 2 equal sides and 2 equal angles.

Right-angled triangles have 1 angle that is a right angle (90°)

Scalene triangles have no equal sides and no equal angles.

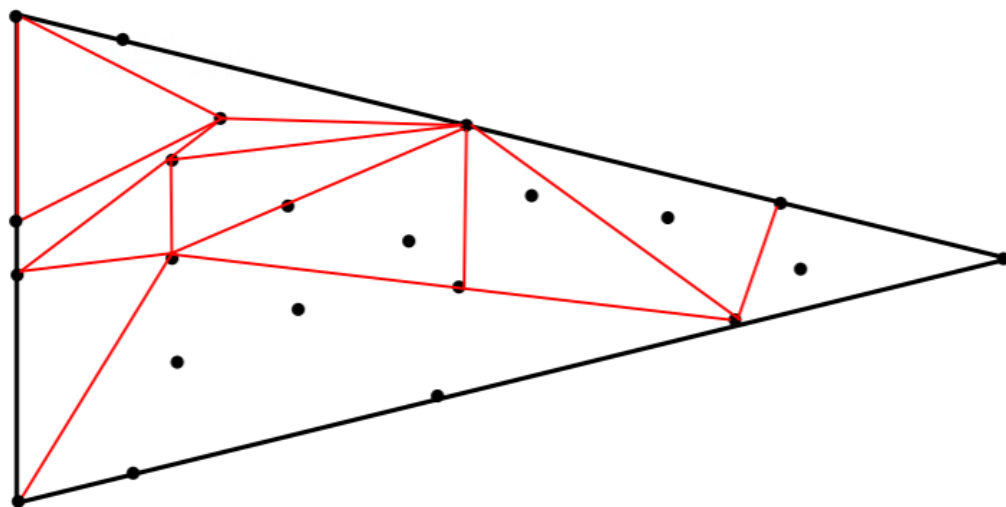
Various possible answers, for example:



the dots to create triangles. **Various possible answers, for example:**



My favourite number is 12 so I don't want my design to have any more than 12 triangles.



How many scalene triangles are included within your design? **Various possible answers.**