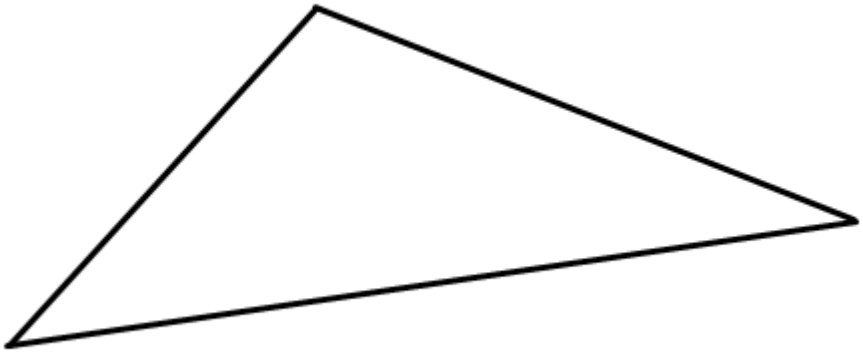
Maths

WALT

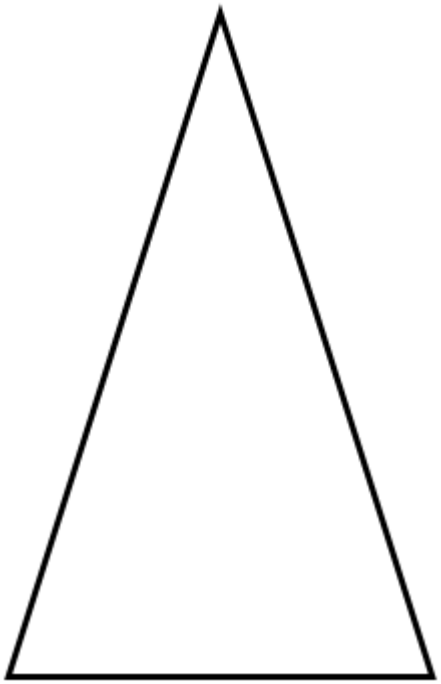
WALT find angles in a triangle
I can:

- name the different types of triangles.
- name the properties of different triangles.
- add and subtract to find missing angles.



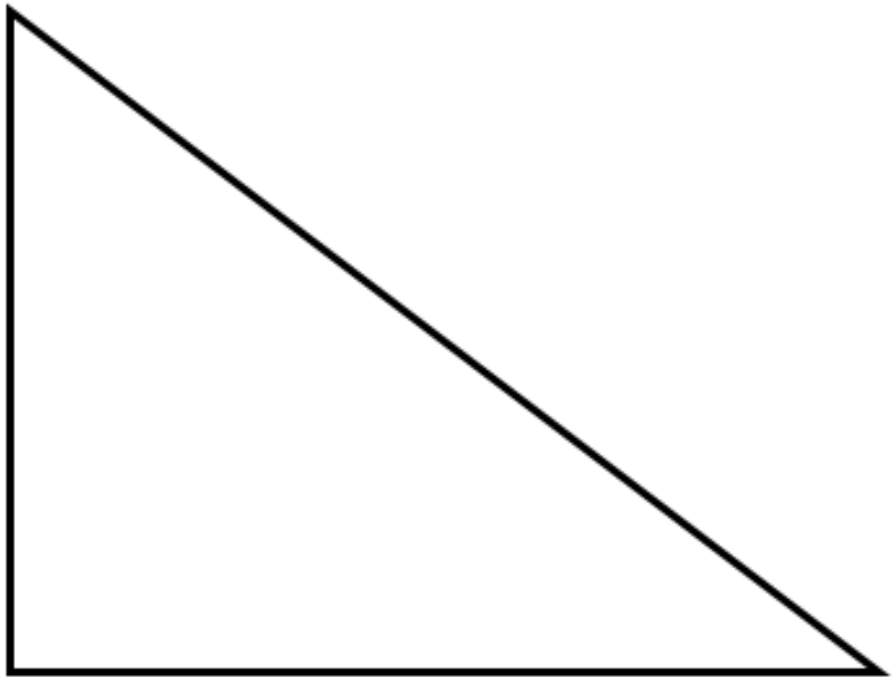
Scalene

- It has three sides
- All the sides are different lengths
- All the angles are different sizes



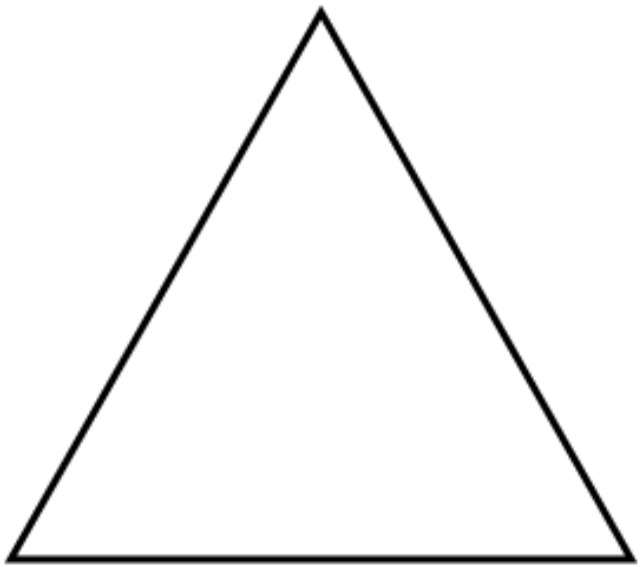
Isosceles

- It has three sides
- It has a pair (2) of equal sides
- It has two equal angles



Right-angled triangle

- It has three sides
- It has a right-angle



Equilateral

- It has three sides
- All of its sides are equal
- All of its angles are equal

Perpendicular lines

All angles equal

All sides equal

Some equal sides

No equal sides

Right-angles

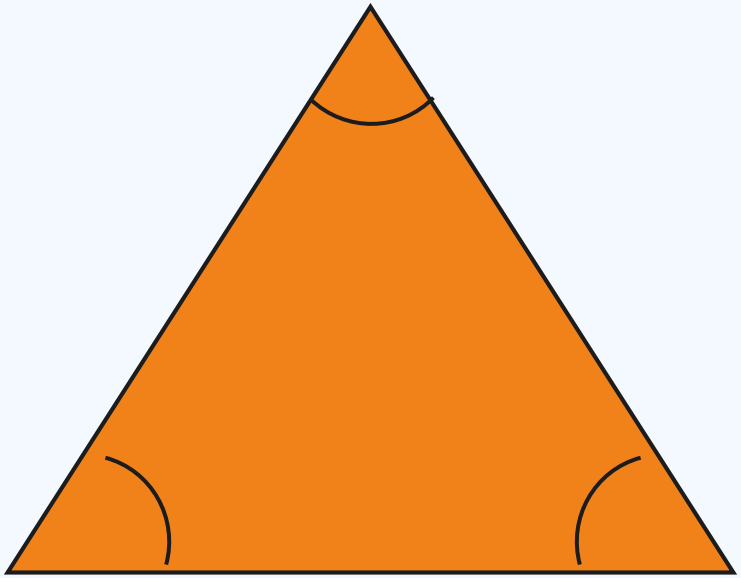
Equal angles

Triangles

The interior angles in a triangle always total 180°.

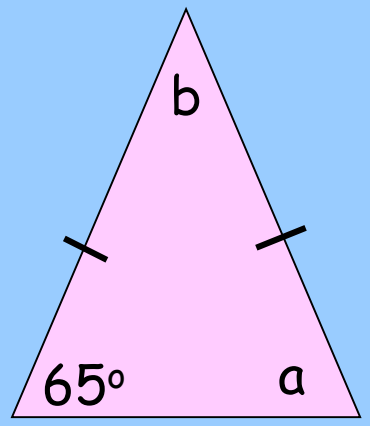
This means that if the triangle is equilateral, and the all the angles are equal then each angles must be 60°

180 ÷ 3 = 60



Isosceles Triangle

Calculate angle a

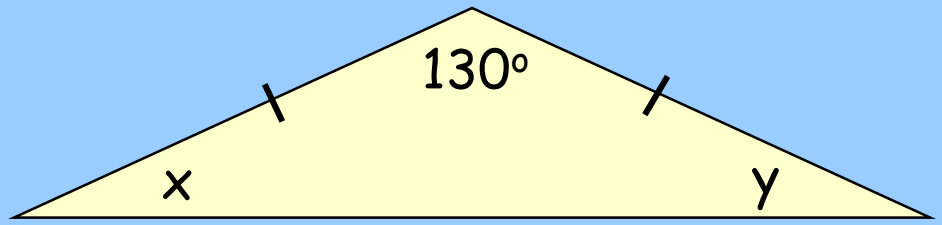


Angle a = 65° (base angles of an isosceles triangle are equal).

Angle b = 180 –(65 + 65)

= 180 – 130 = 50°

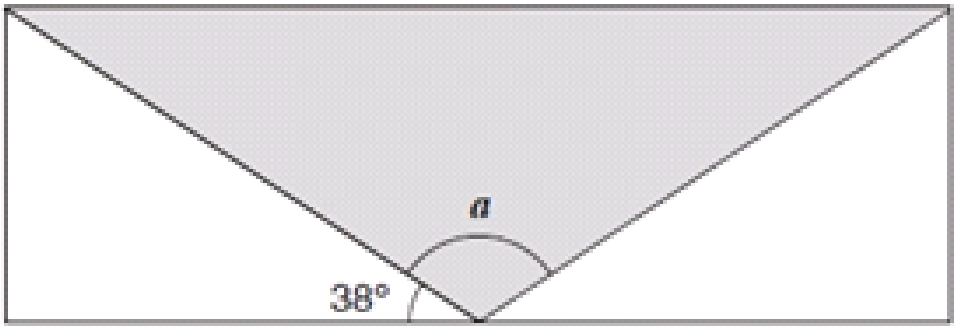
Calculate angles x and y



Angles x and y = $\frac{180 - 130}{2}$

= $\frac{50}{2}$ = 25°

Q4. A shaded **isosceles** triangle is drawn inside a rectangle.



Not to scale

Calculate the size of angle a.

Show your method

°