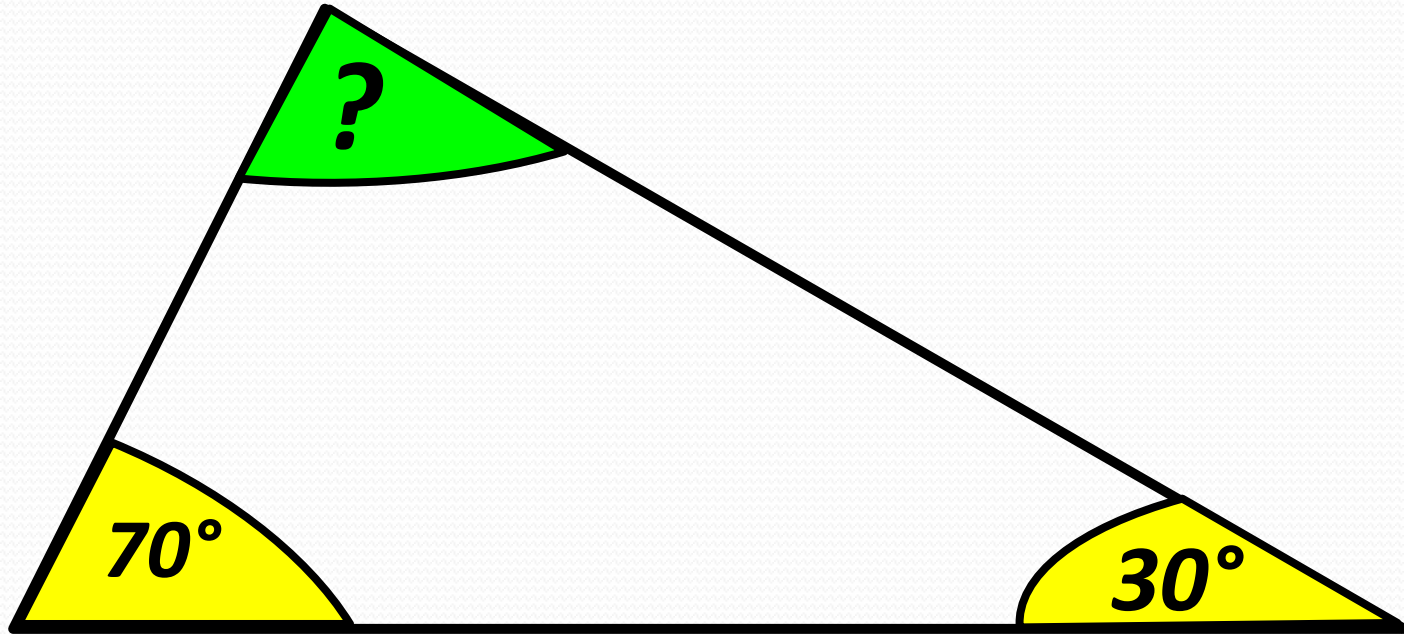# Triangles and Quadrilaterals

WALT:

to find missing angles in special triangles
To calculate the degrees in a quadrilateral and find missing angles
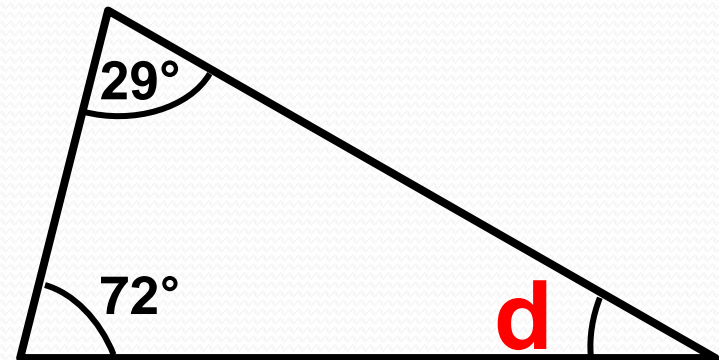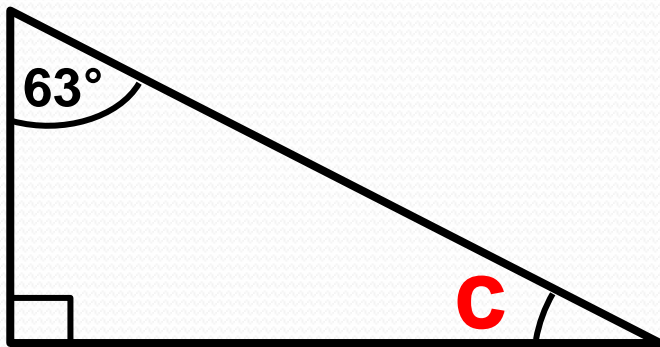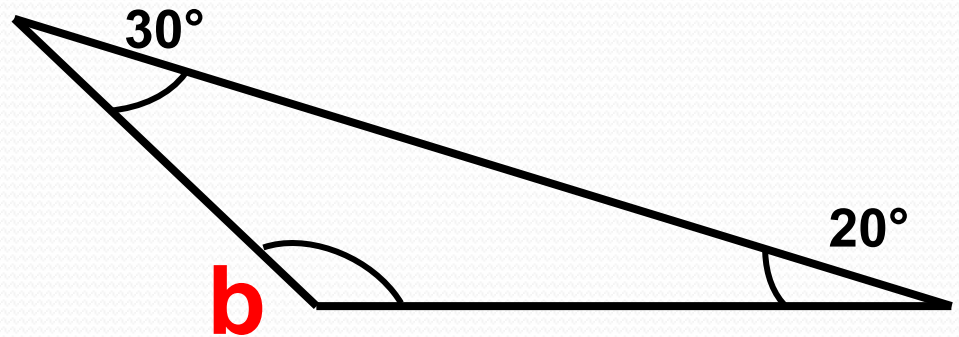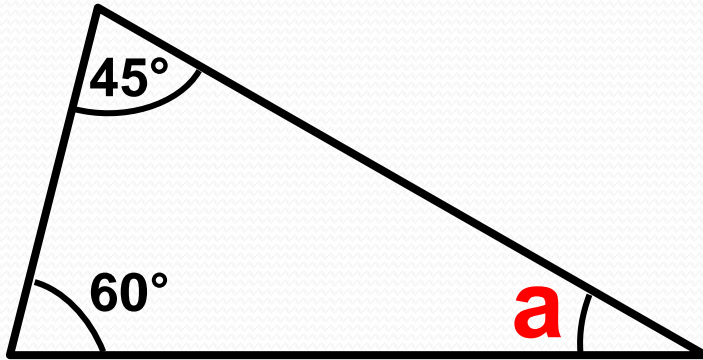
Angles in a Triangle <u>always</u> add up to 180°

?

70°

30°

To find the missing angle
180° – (sum of given angles) = ?

180° - 70°- 30° = 80°

Find the missing angles a, b, c and d.
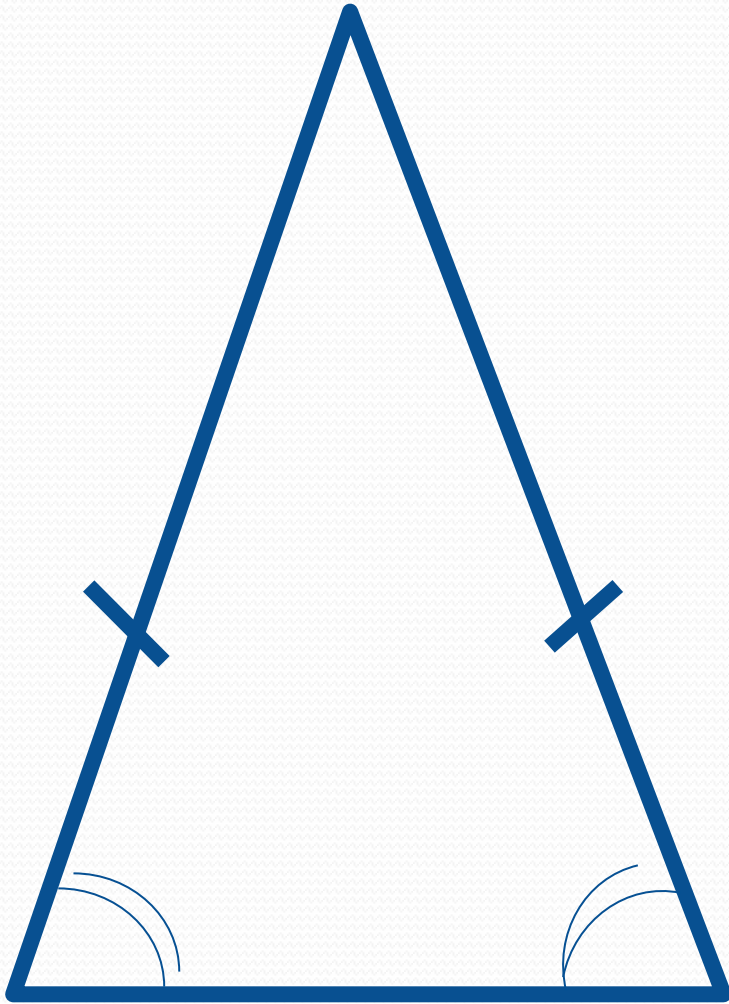
Equilateral Triangle
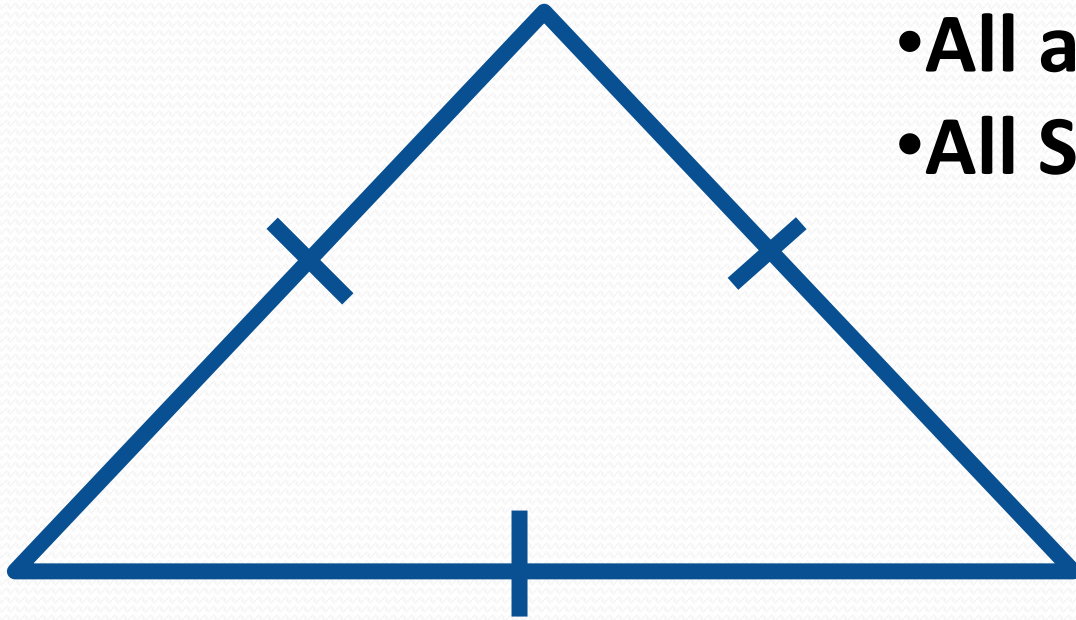
- All angles are equal.
- All Sides are equal
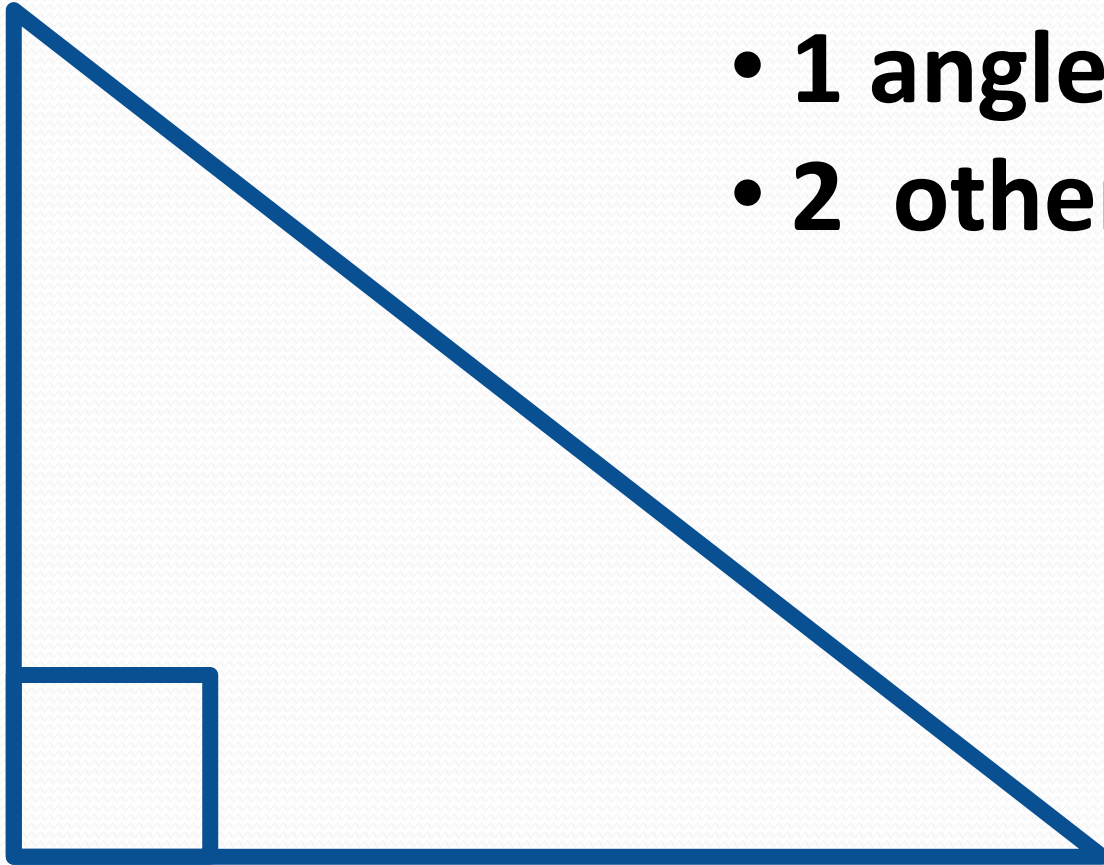
The angles are <u>always</u> 60°
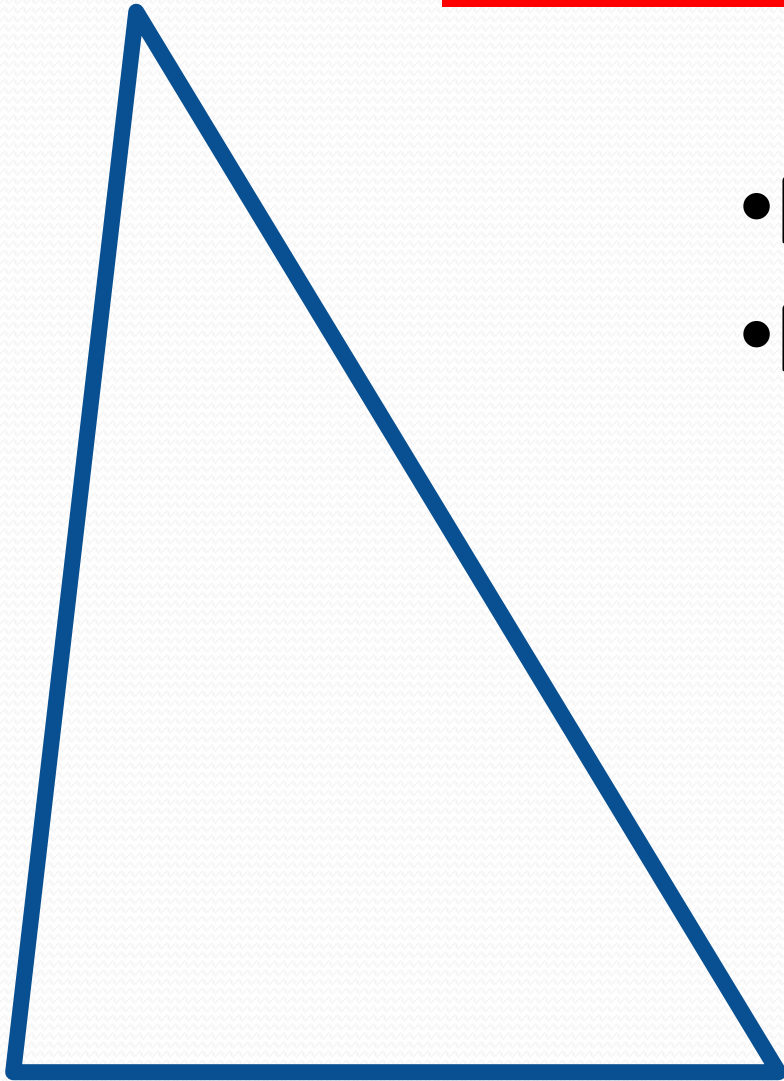
Isoceles Triangle

- **2 angles are equal.**
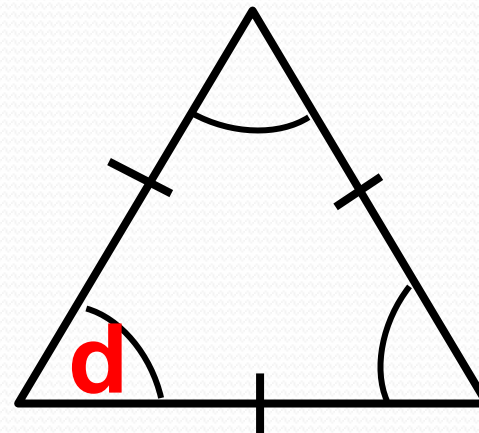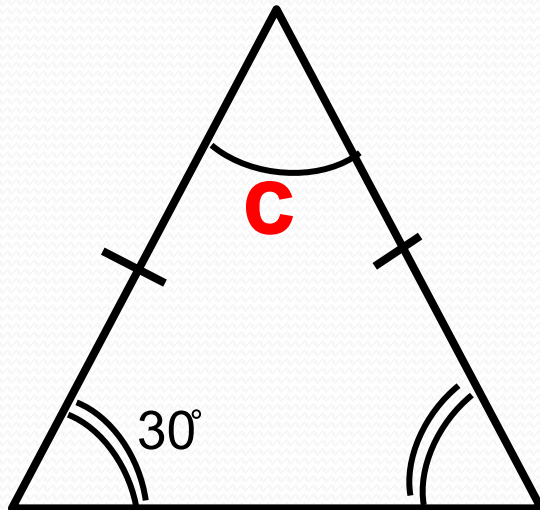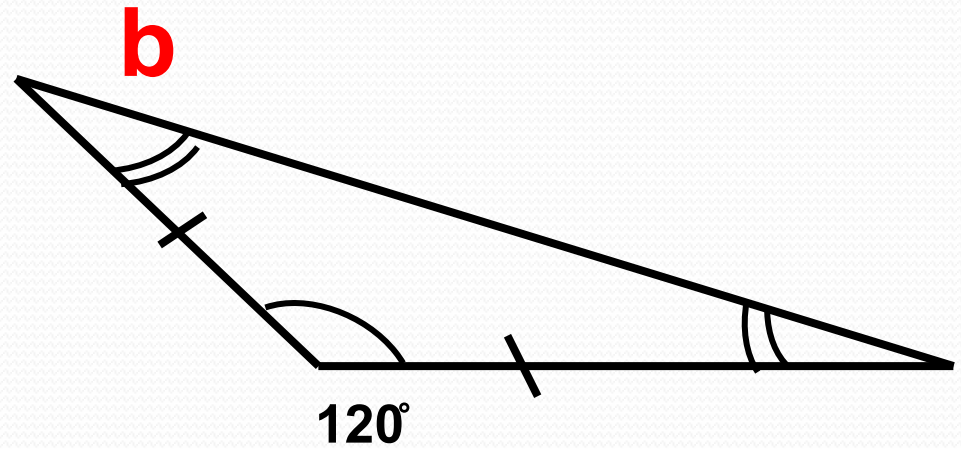- **2 Sides are equal**

<u>Right – Angled</u> Triangle
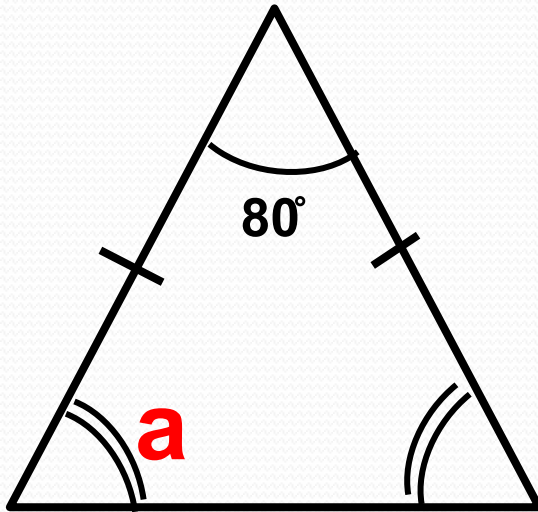
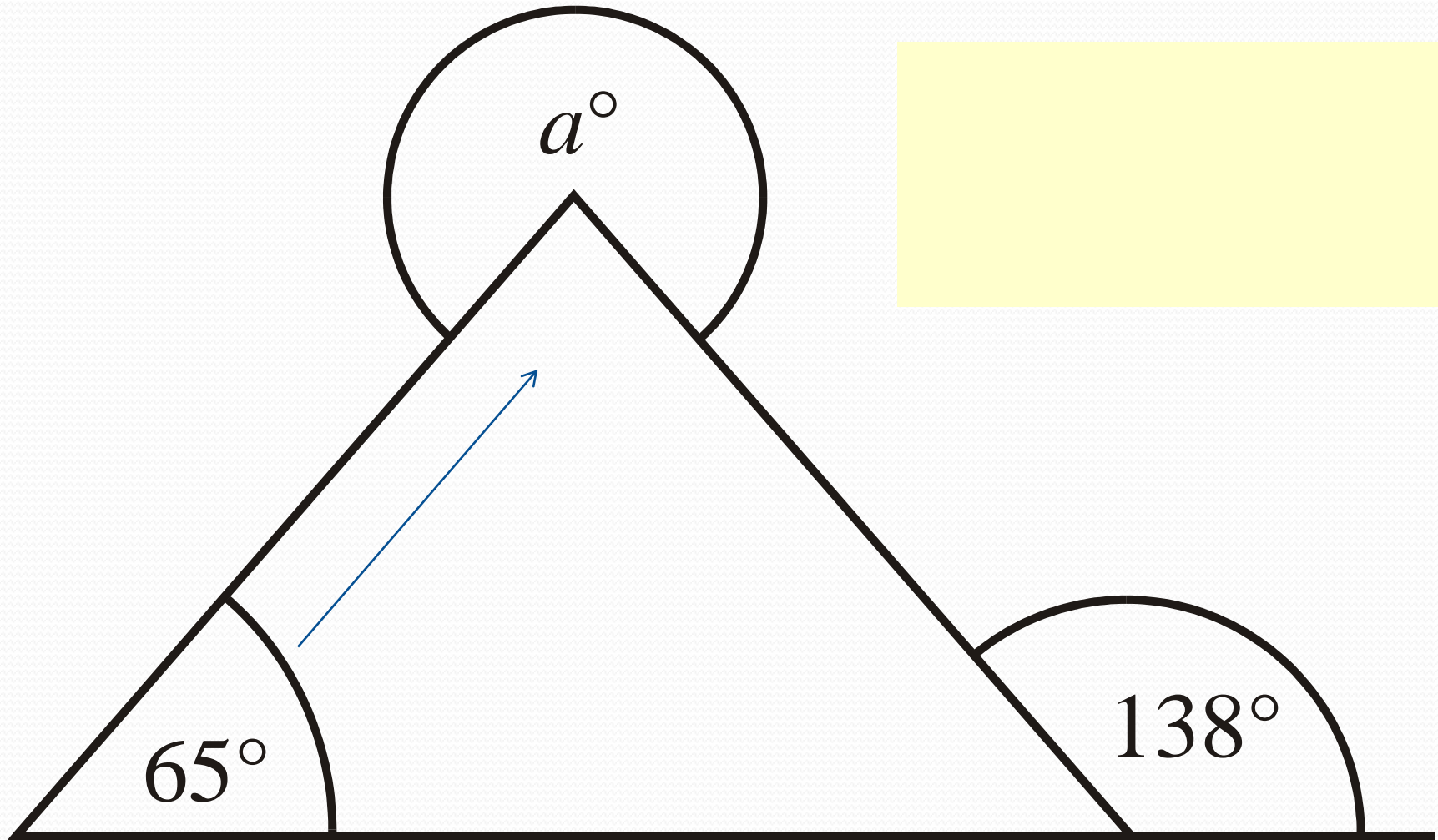- 1 angle always 90°
- 2 other angles = 90°

Scalene Triangle

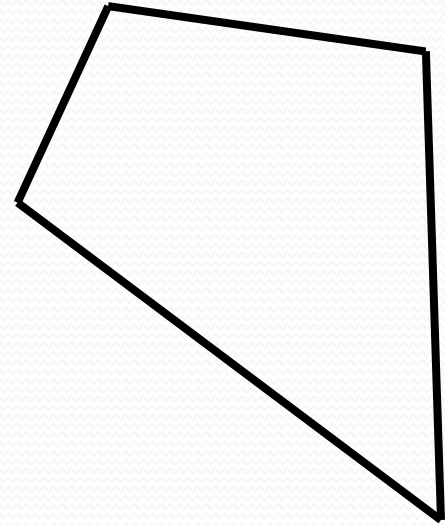- No Equal Sides
- No Equal angles

Find the missing angles

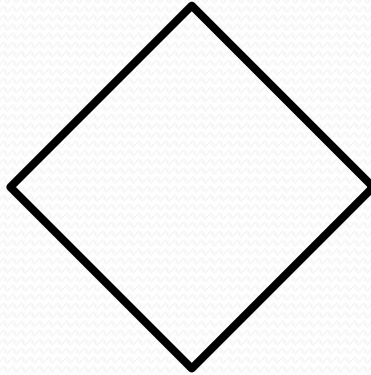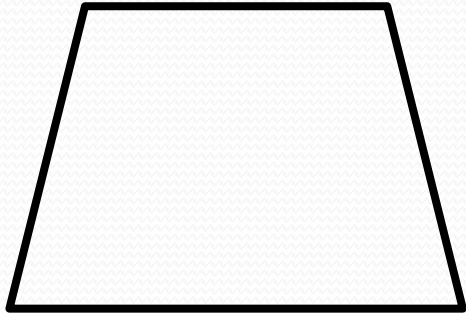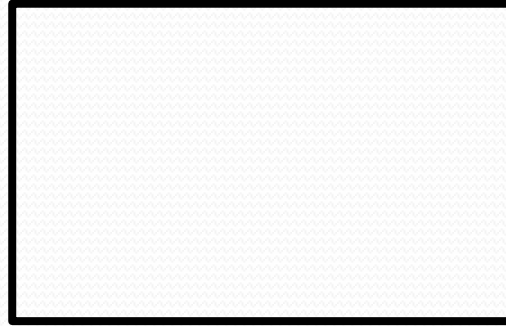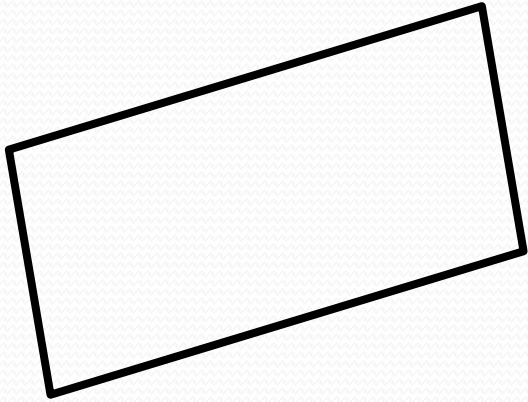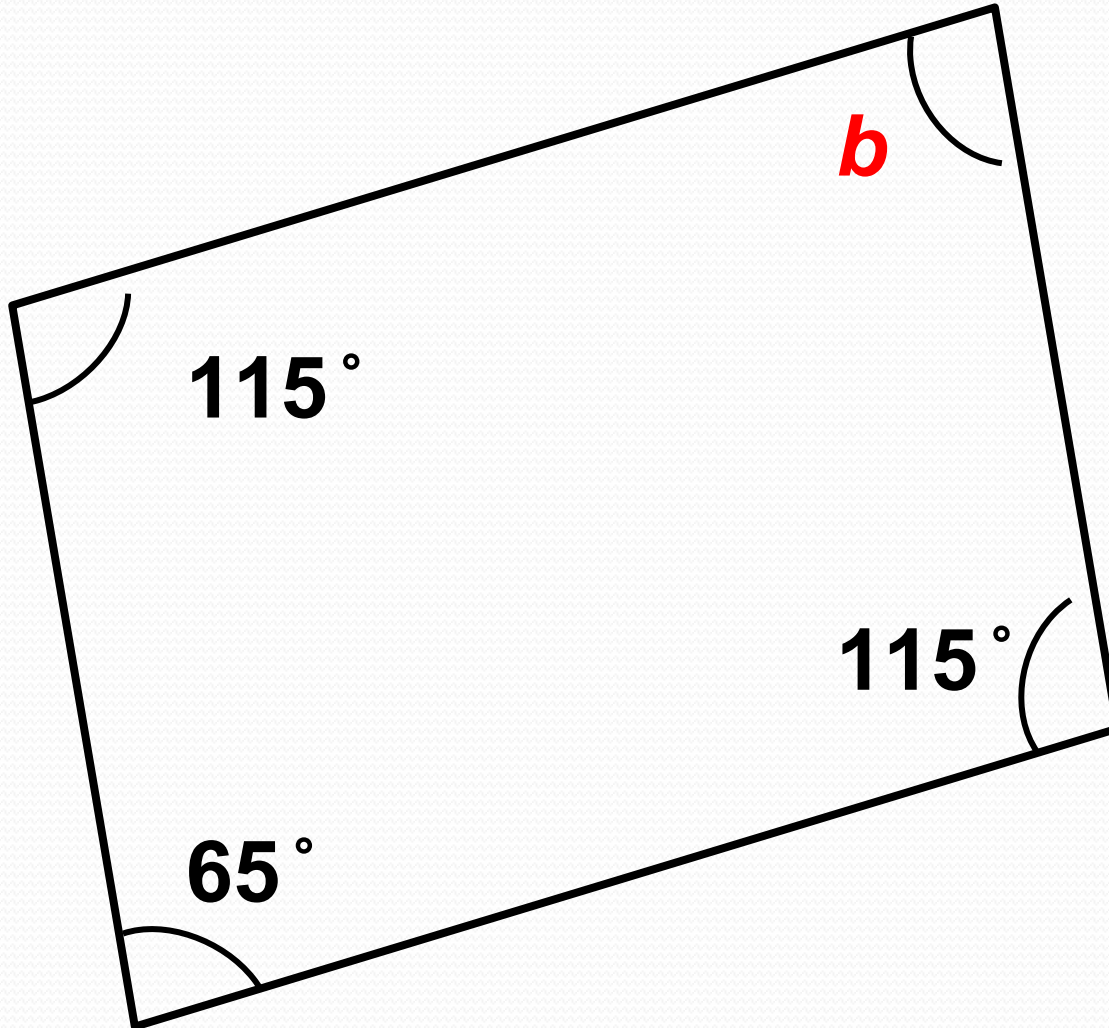# Can you work out the missing angle *a?*

What do all of these shapes have in common?

Can you work out the missing angle *b?*

Odd one out?

- 40, 40, 140   50, 50, 80   30, 40, 110

- 35, 45, 90   60, 60, 60   100, 20, 70

Sometimes, Always, Never

1. Triangles can have more than 1 obtuse angle

2. A right angled triangle can also be an isoceles angle

3. A triangle with a 60º angle is an equilateral

4. There are two triangles in all 4 sided shapes