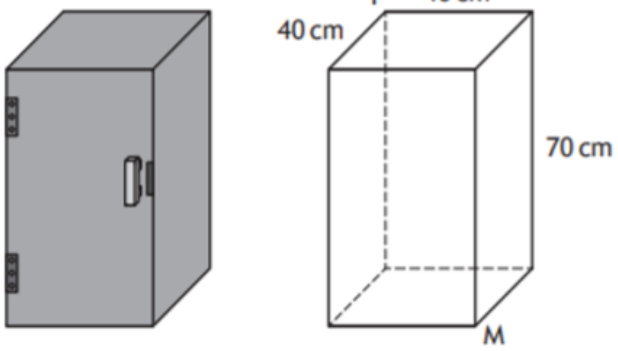
16. Chris wants to store his umbrella in a locker.

The locker is a cuboid with internal dimensions of length 40 centimetres, breadth 40 centimetres and height 70 centimetres.



The umbrella is 85 centimetres long.

He thinks it will fit into the locker from corner P to corner M.

Is he correct?

Justify your answer.

Properties of Triangles

Today we are learning...

The properties and types of triangles.

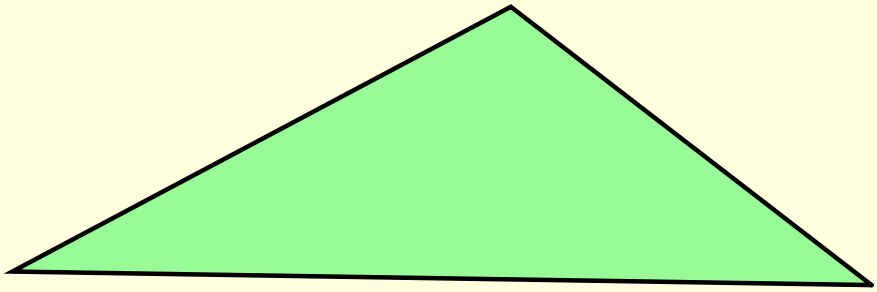
I will know if I have been successful if...

I can identify and name special triangles.

I can find interior angles of a triangle.

I can find exterior angles of a triangle.

What is the name of this triangle?

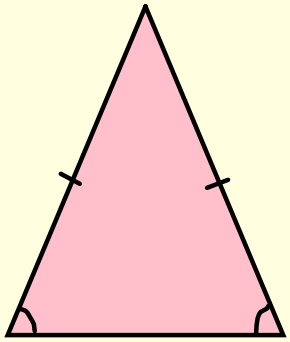


Sides have different lengths.

Angles are all different.

Scalene Triangle

What is the name of this triangle?

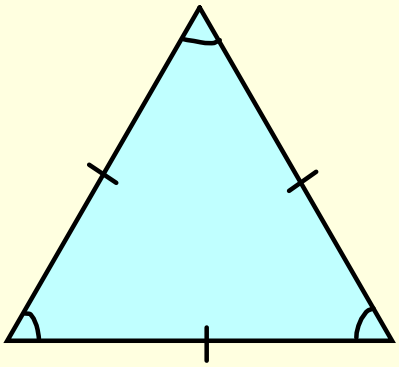


Two sides of equal length.

Two equal angles.

Isosceles Triangle

What is the name of this triangle?

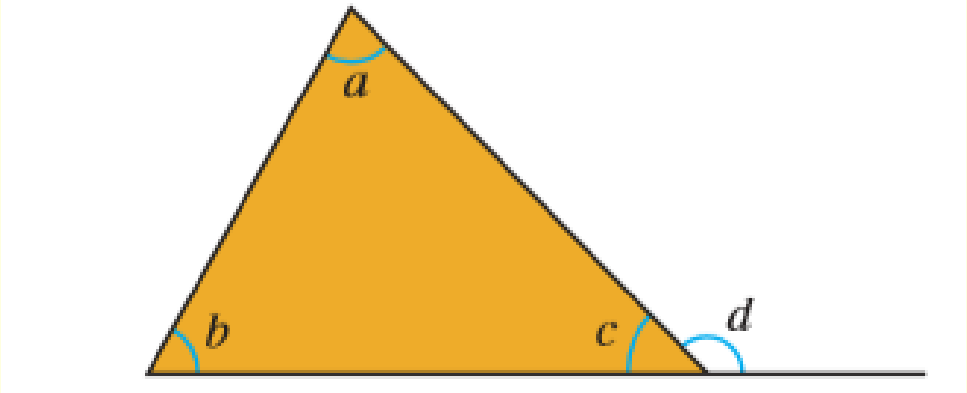


All sides are of equal length.

All angles are 60°.

Equilateral Triangle

Interior and Exterior Angles of a Triangle



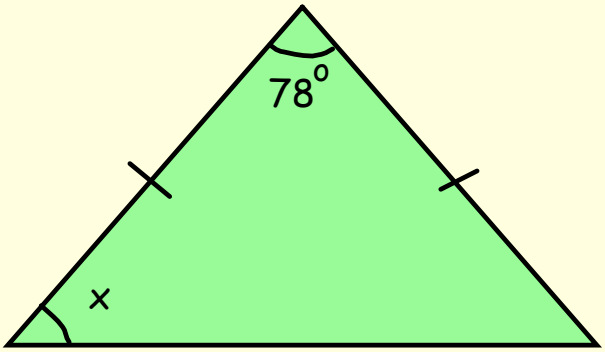
a, b and c are called the interior angles.

$a + b + c = 180^{\circ}$

d is an example of one exterior angle.

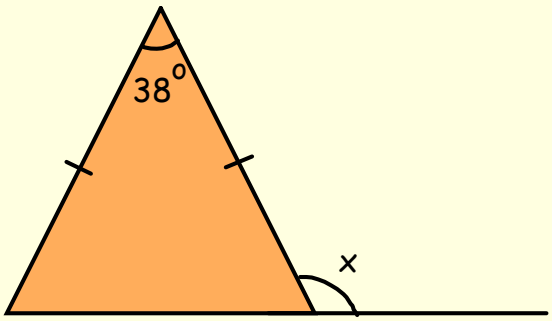
Example 1

In the diagram find the missing angle x.



Example 2

In the diagram find the missing angle x.



Properties of Quadrilaterals

Today we are learning...

How to find missing angles in quadrilaterals.

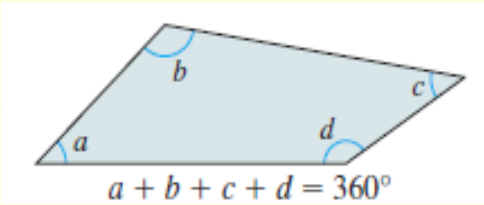
I will know if I have been successful if...

I am able to identify and name common quadrilaterals.

I know the sum of the interior angles add up to 360.

I can find missing angles in quadrilaterals.

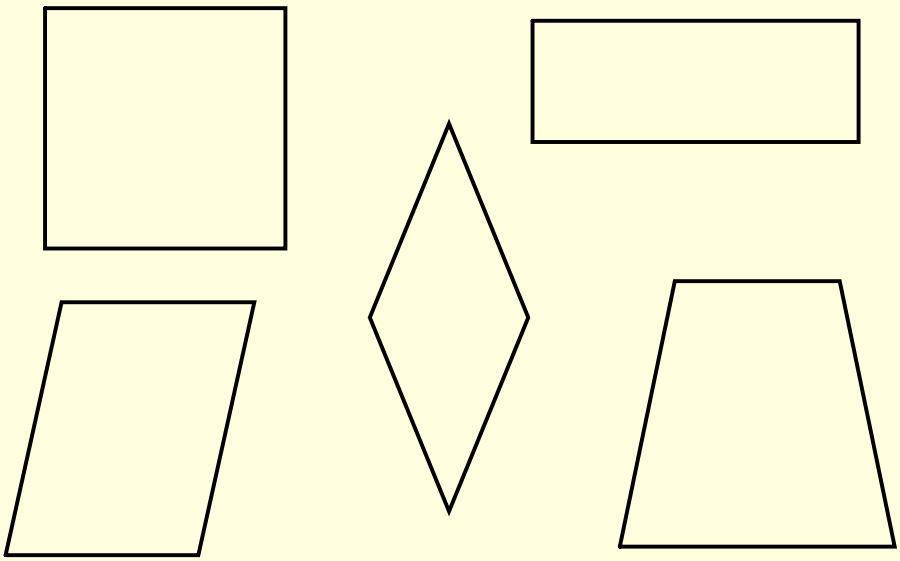
Quadrilaterals



A quadrilateral is a shape made of four straight lines.

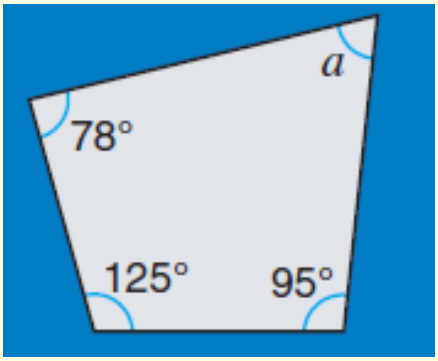
The sum of the four angles of a quadrilateral is 360°.

Special Quadrilaterals



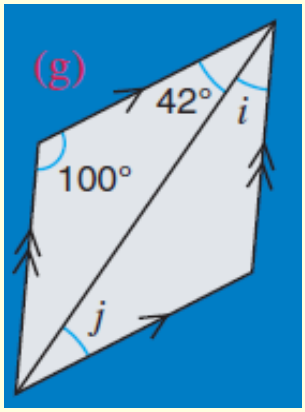
Example 1

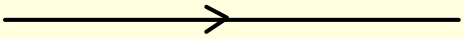
Find the missing angle.



Example 2

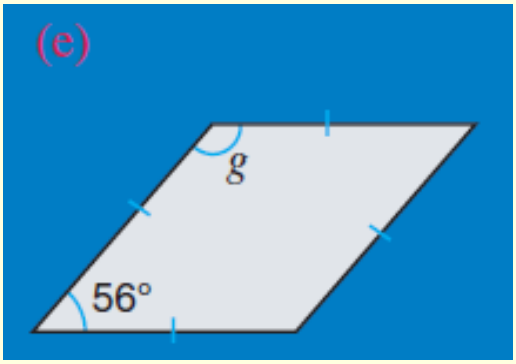
Find the missing angles.

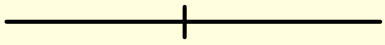


 means lines are parallel.

Example 3

Find the missing angles.



 means lines are of equal length.