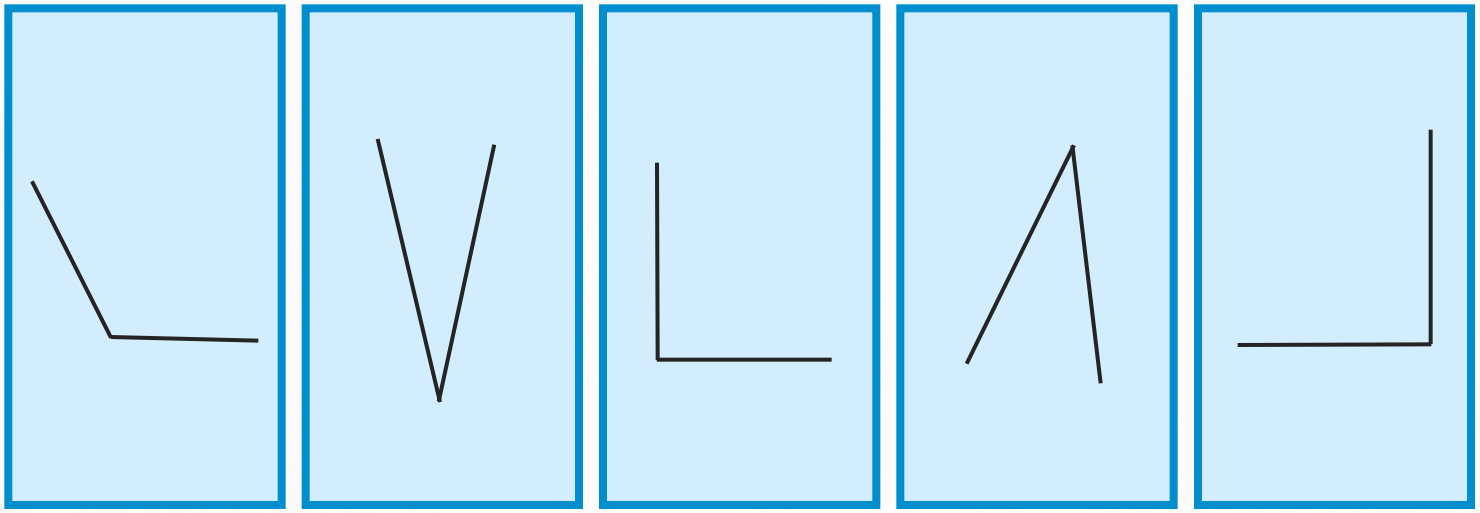
Diving into Mastery

Identify Angles

Identify Angles

Diving

Which angles are acute?



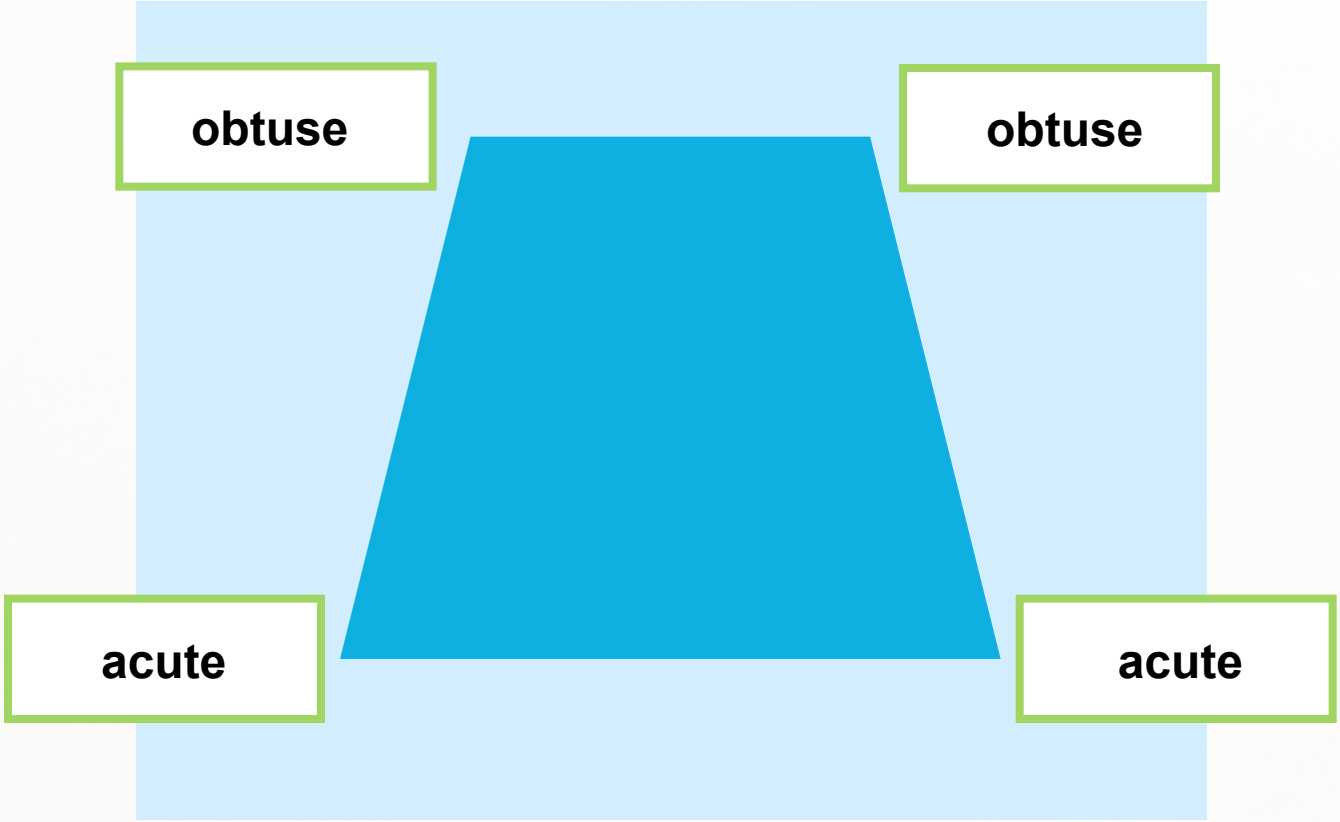
What other types of angle can you identify above?

one obtuse angle and two right angles

Identify Angles

Diving

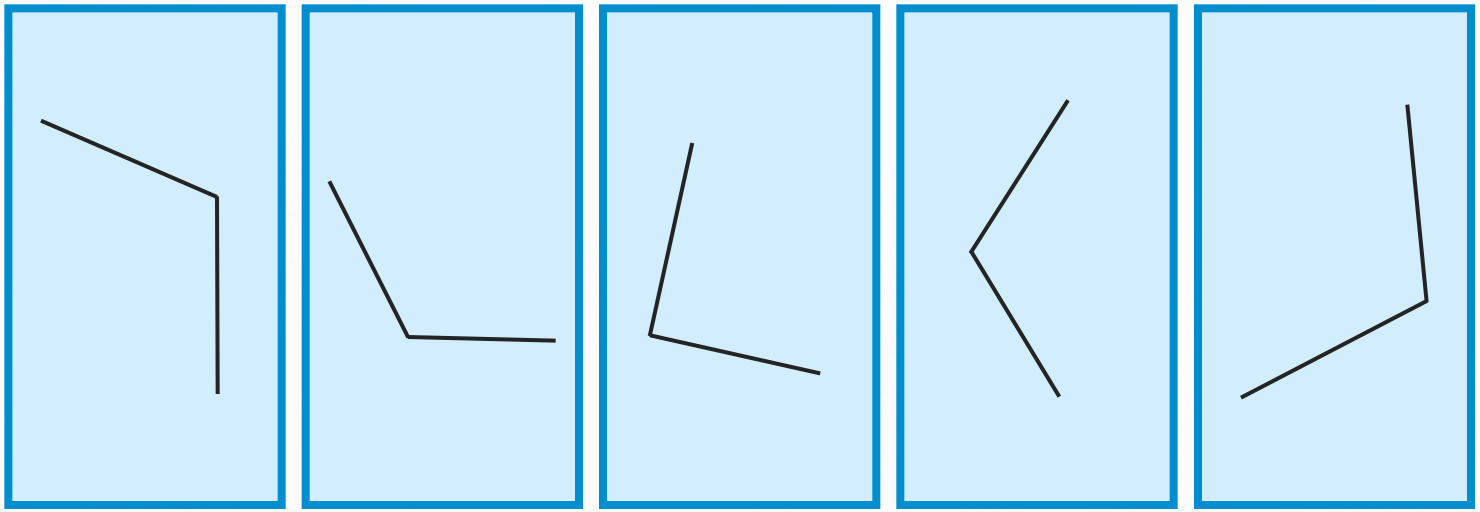
Look at this trapezium.
What types of angles can you see inside it?



Identify Angles

Deeper

Which angle is the odd one out?

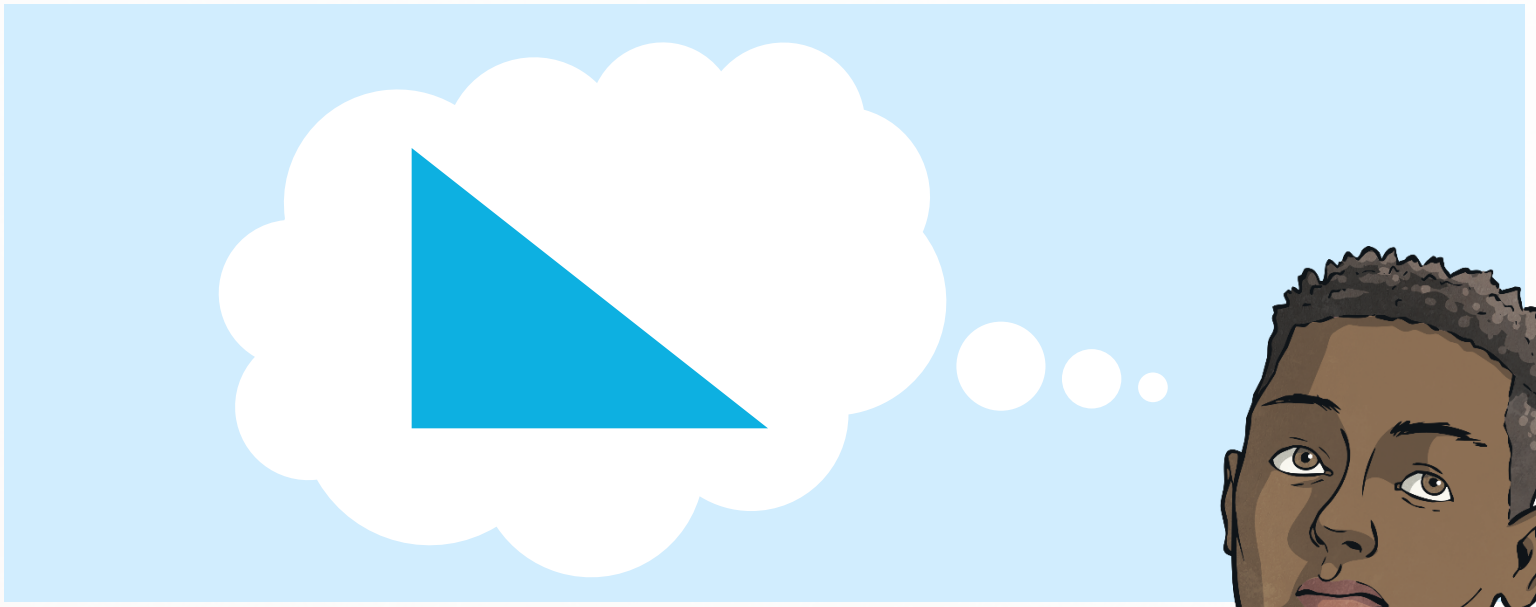


Why?

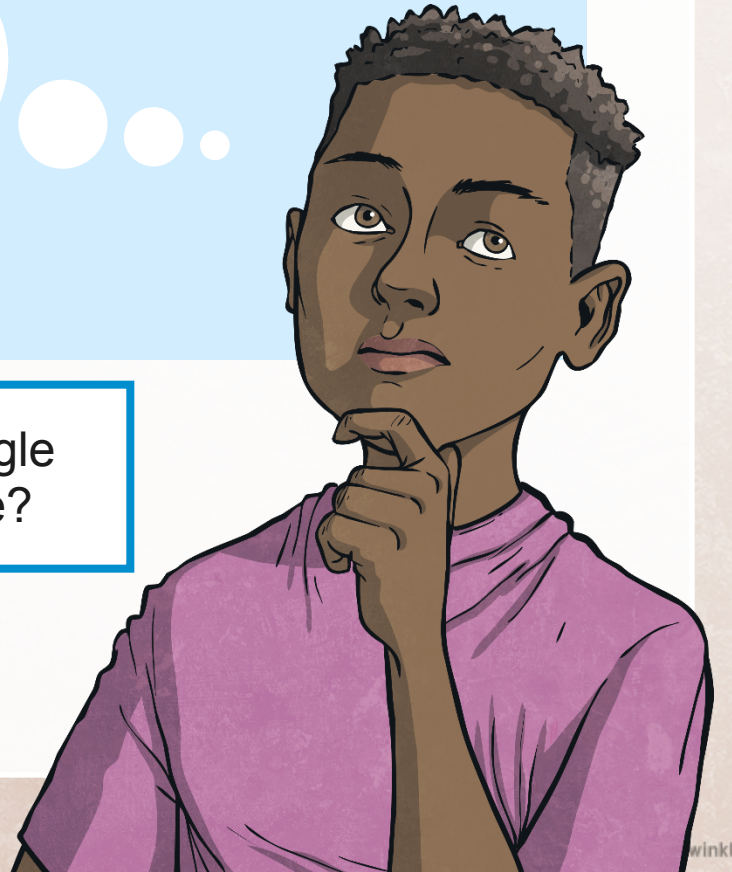
It’s the only angle that isn’t obtuse; it’s a right angle.

Identify Angles

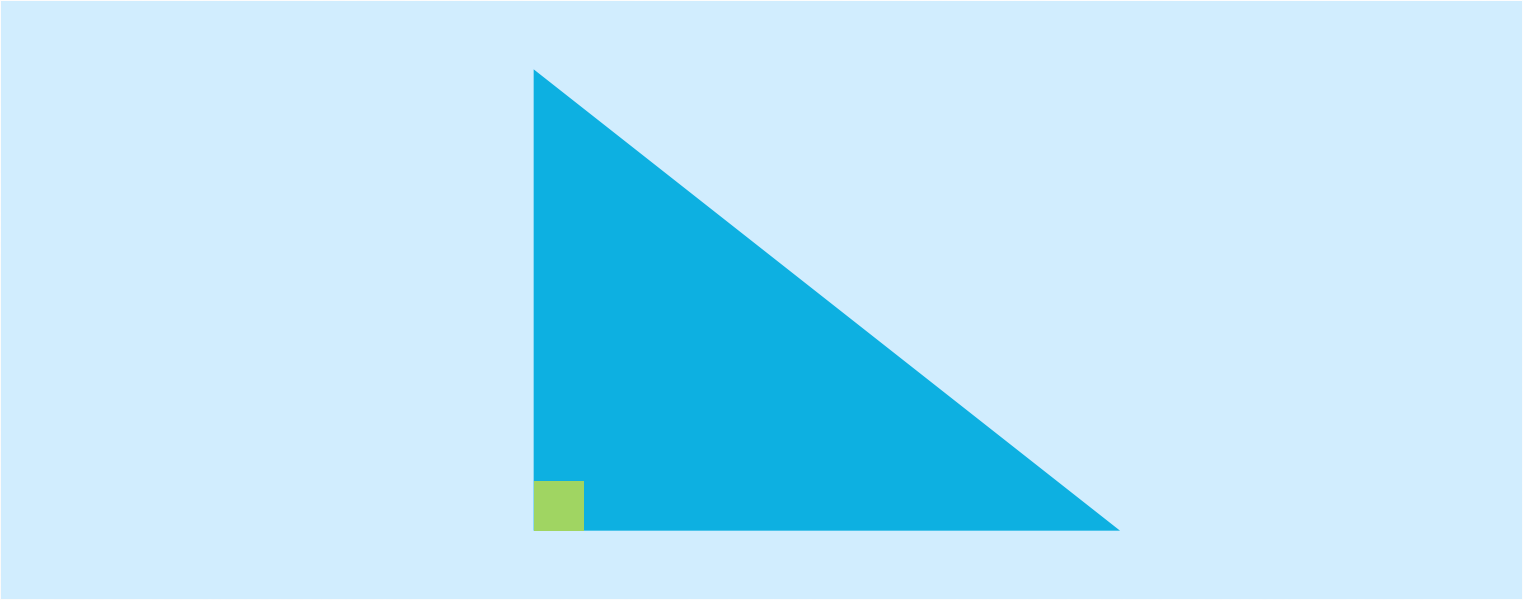
Deeper



Is it possible to draw a right-angled triangle where one of the other angles is obtuse?



Identify Angles | Deeper



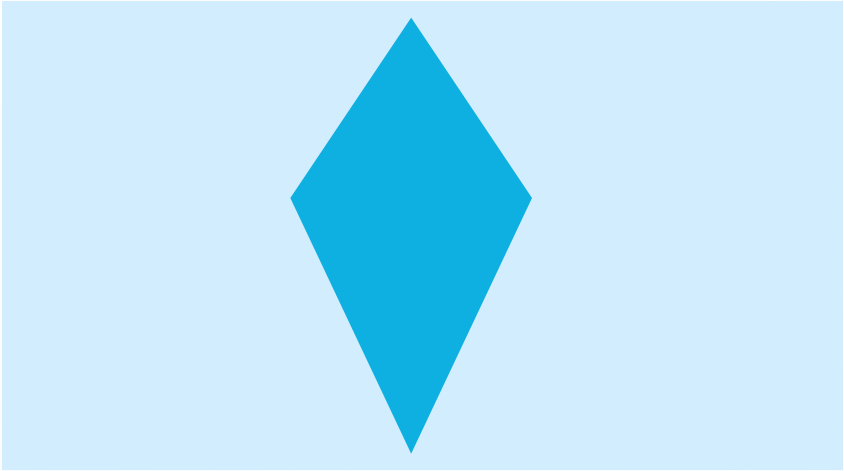
The angles in a triangle always total 180 degrees. Therefore, in a right-angled triangle, the right angle is 90 degrees, making it impossible for either angles to be obtuse.

Which of these statements about a kite is:

a) never true?

b) always true?

c) sometimes true?



A kite has two equal angles.	**always true**
A kite has four right angles.	**never true**
A kite has two equal obtuse angles.	**sometimes true**

A right angle is 90°.
An obtuse angle is greater than 90° but smaller than 180°.
An acute angle is smaller than 90°.

Using these facts, what is the smallest number of degrees you could add to **45°** to make an obtuse angle? How do you know?

46°
The smallest obtuse angle must be 91° and 45 + 46 = 91.