

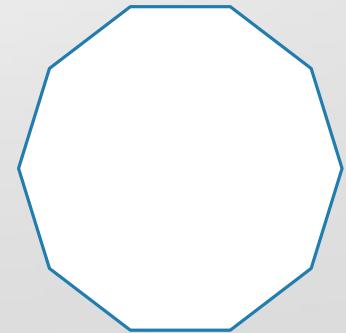
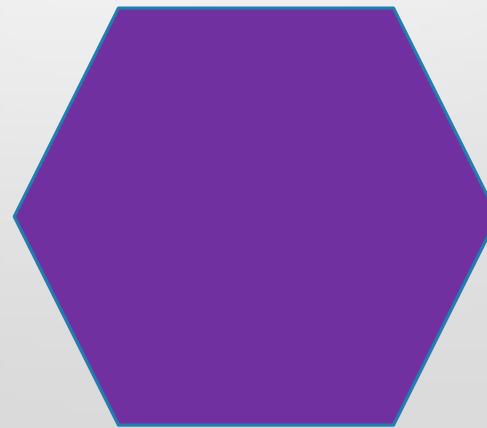
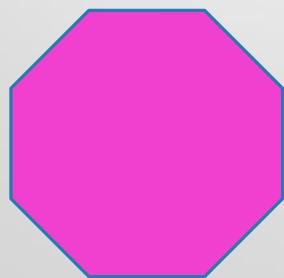
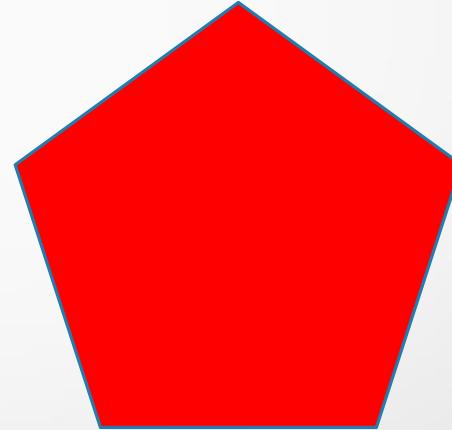
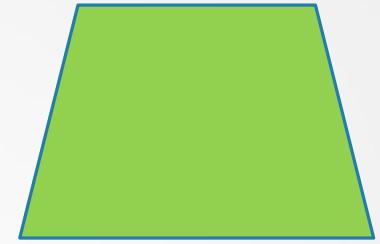
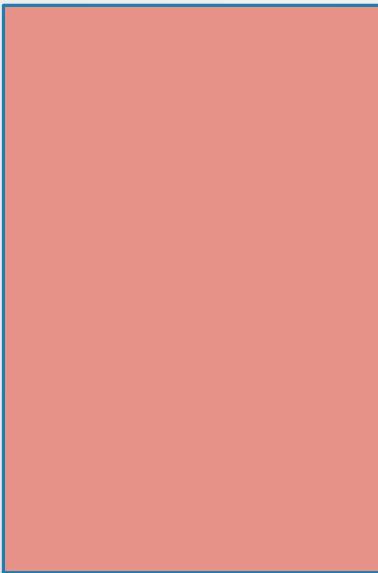


Summer 2 Week 1

Lesson 4

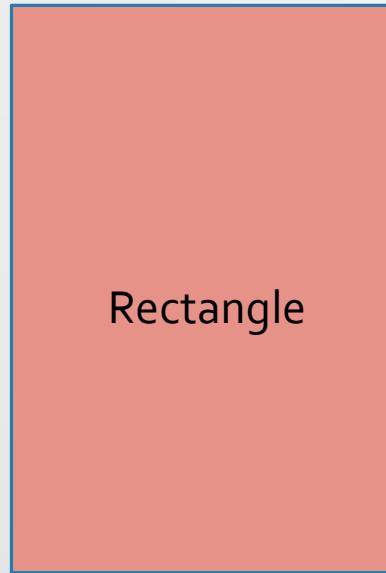
Starter

Name these shapes.

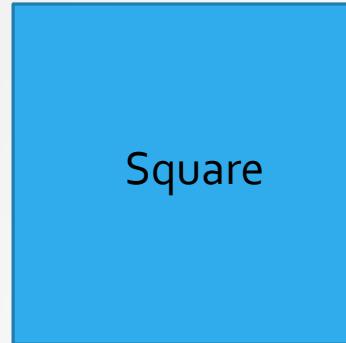


Starter

Name these shapes.



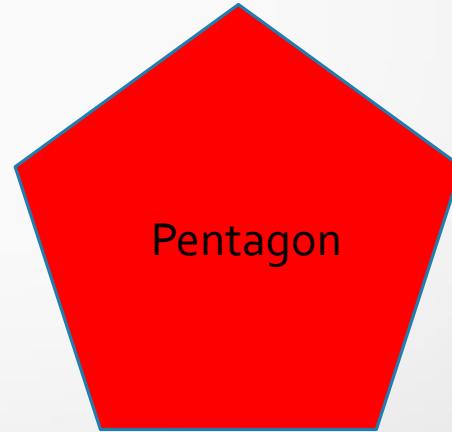
Rectangle



Square



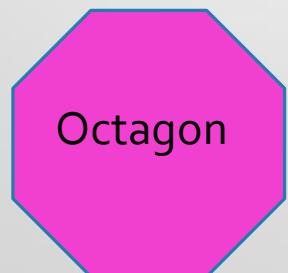
Trapezoid



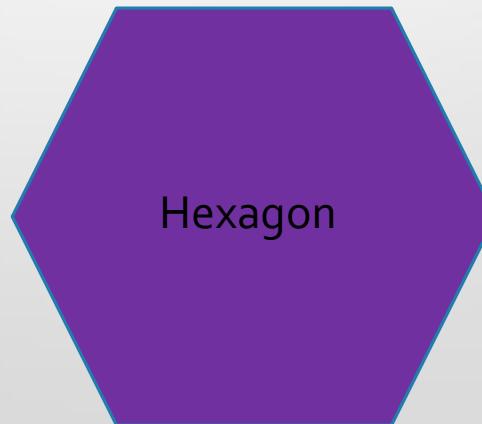
Pentagon



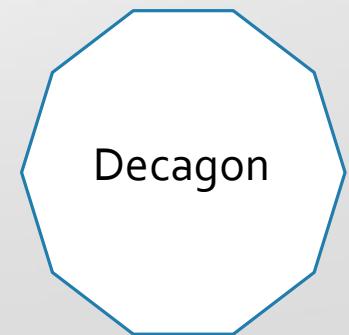
Parallelogram



Octagon



Hexagon



Decagon



Vocabulary

Learning Question:

How can I decide if an angle is obtuse, acute or a right angle and how can I order them?

Success Criteria:

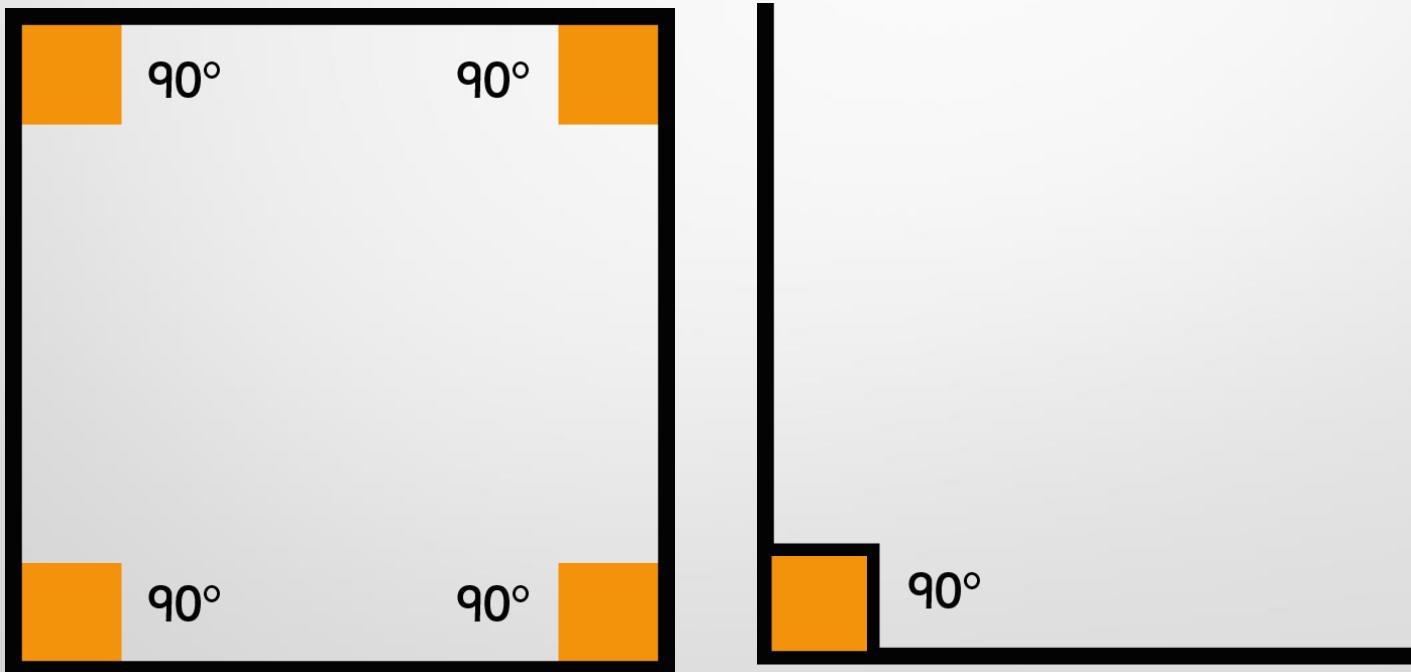
- Understand that there are 3 types of angles: Right angle, acute and obtuse.
- Right angles = 90°
- Acute angles = less than 90°
- Obtuse angles = more than 90°
- Be able to use angle tester to test angles.

- Angles
- Right angle
- Obtuse
- Acute
- 90°
- Squares
- Rectangles
- Regular polygons
- Irregular polygons

Right Angles

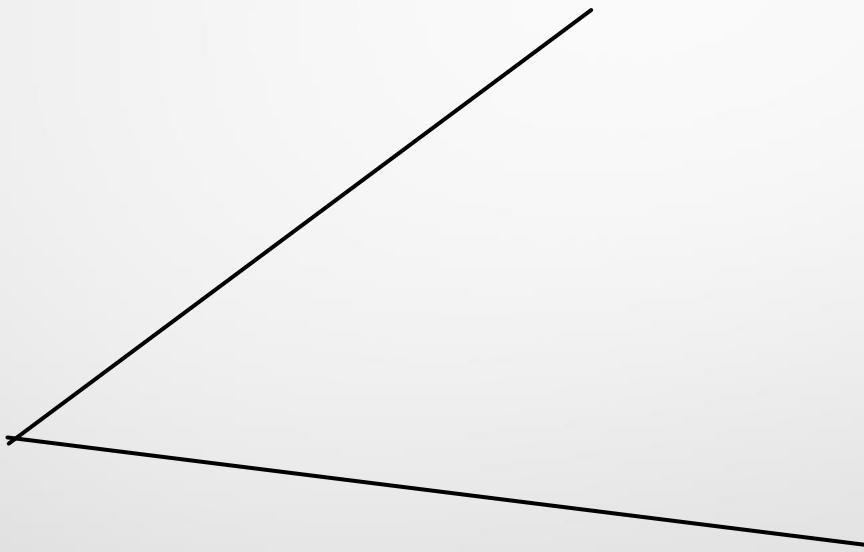
Angles that are 90° are called right angles and are marked with small squares.

A right angle is formed by the intersection of 2 perpendicular lines.



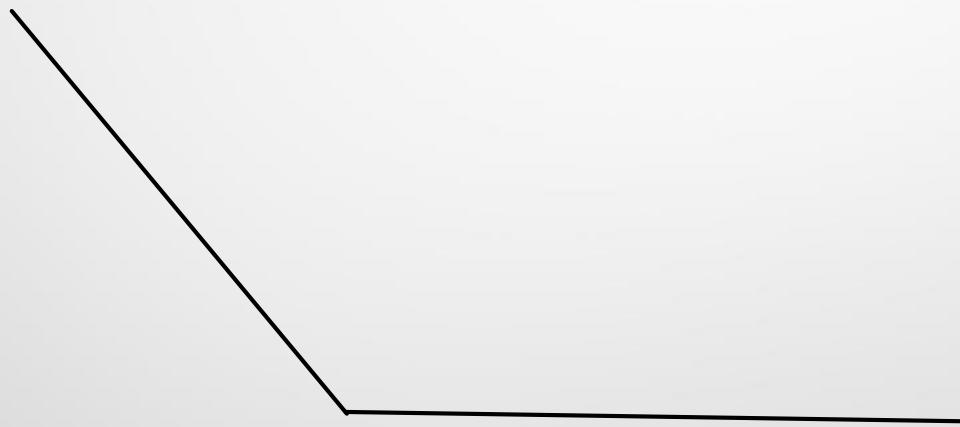
Acute Angles

Angles that are less than 90° are called acute

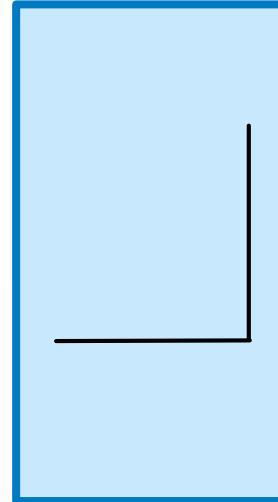
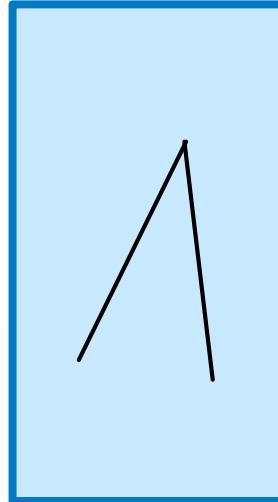
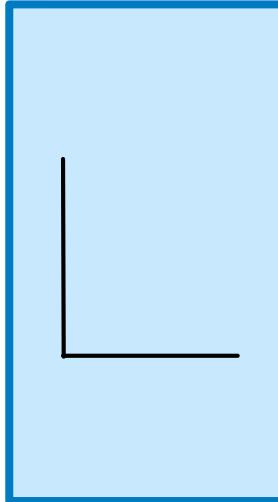
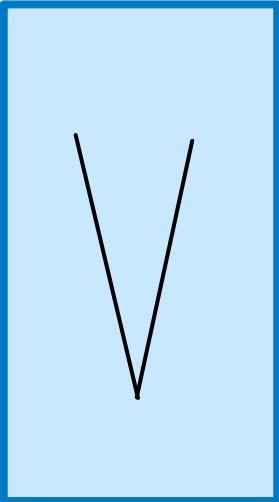
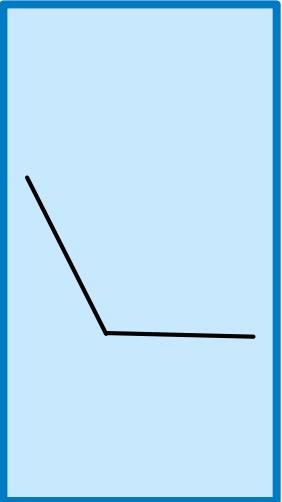


Obtuse Angles

Angles that are more than 90° are called obtuse.

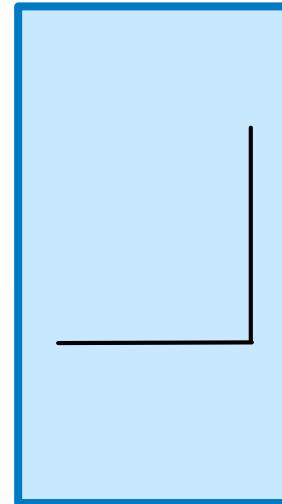
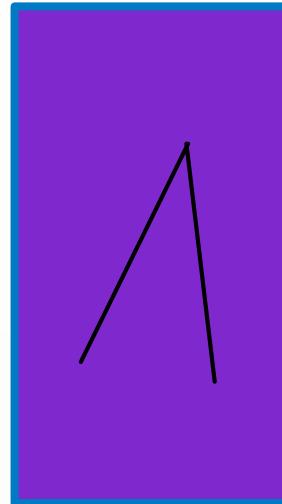
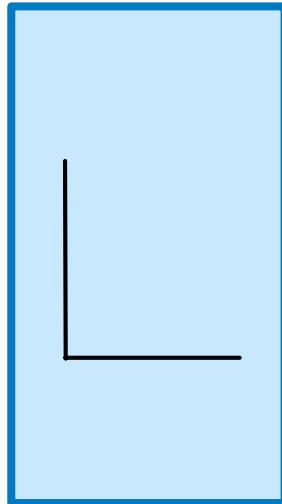
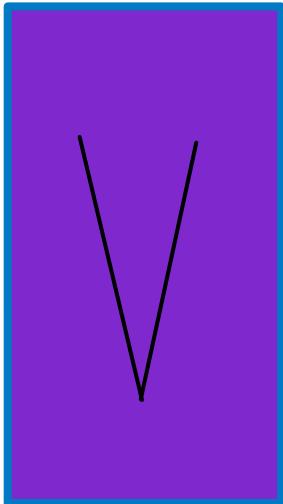
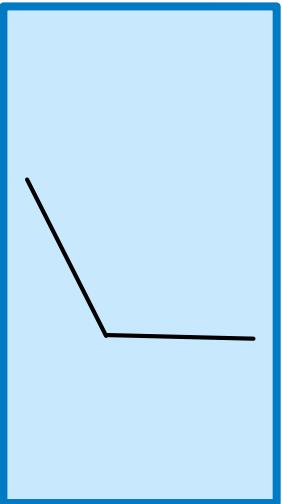


Which angles are acute?



What other types of angle can you identify above?

Which angles are acute?



What other types of angle can you identify above?

1 Obtuse angle and 2 right angles

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

obtuse

obtuse

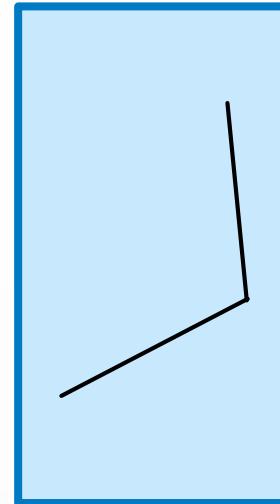
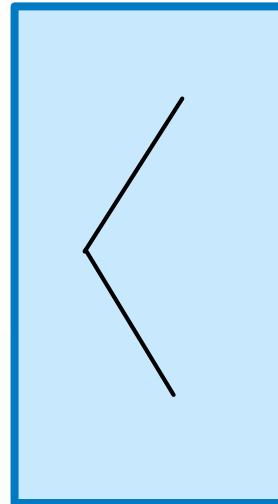
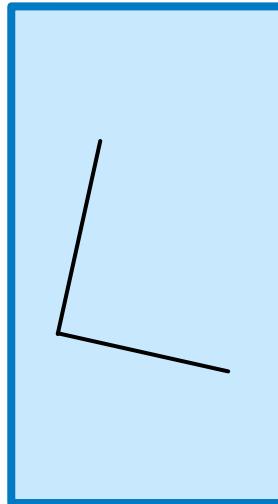
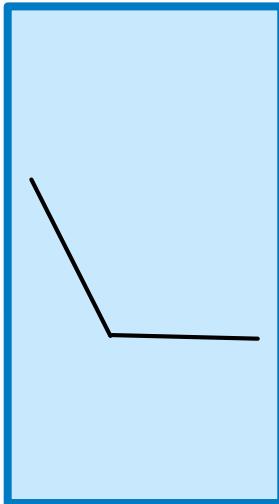
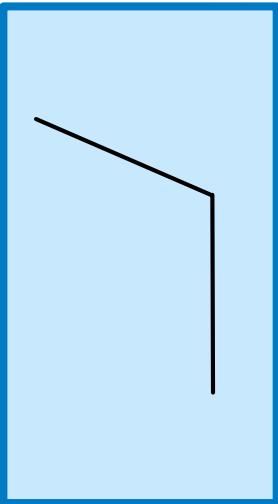
acute

acute

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

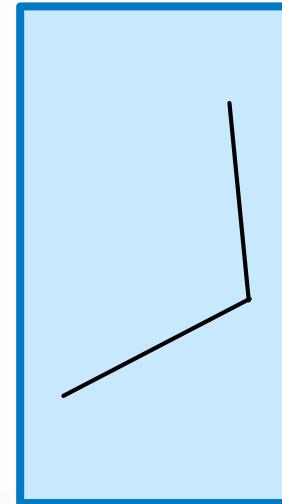
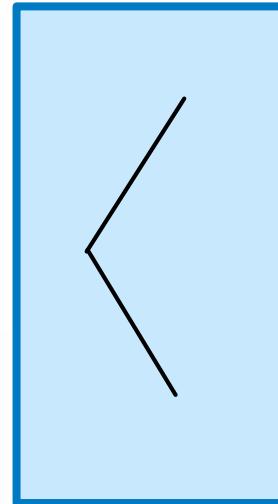
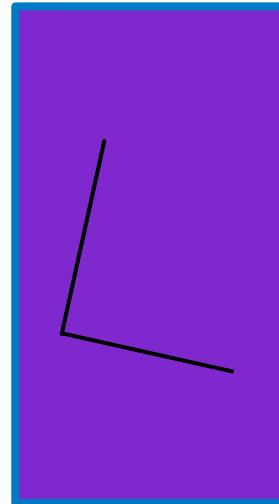
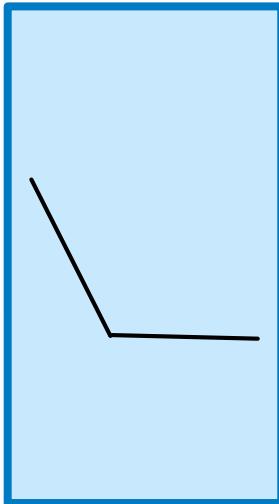
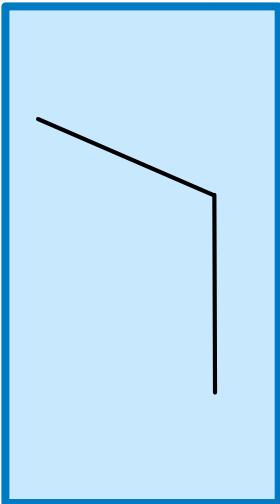


Which angle is the odd one out?



Why?

Which angle is the odd one out?

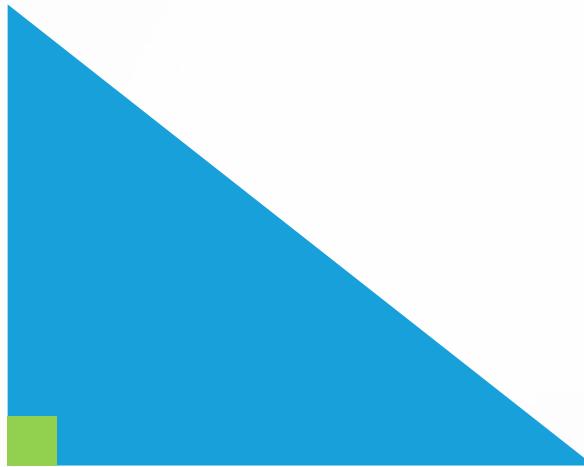


Why?

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



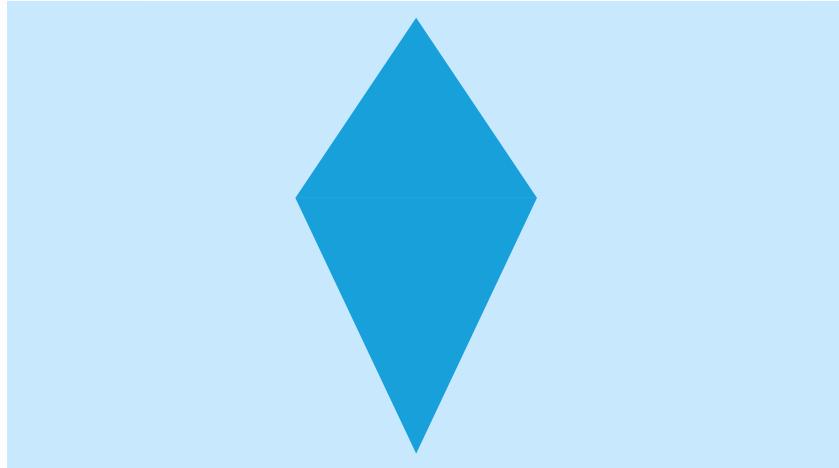
Is it possible to draw a right-angled triangle
where one of the other angles is obtuse?



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?



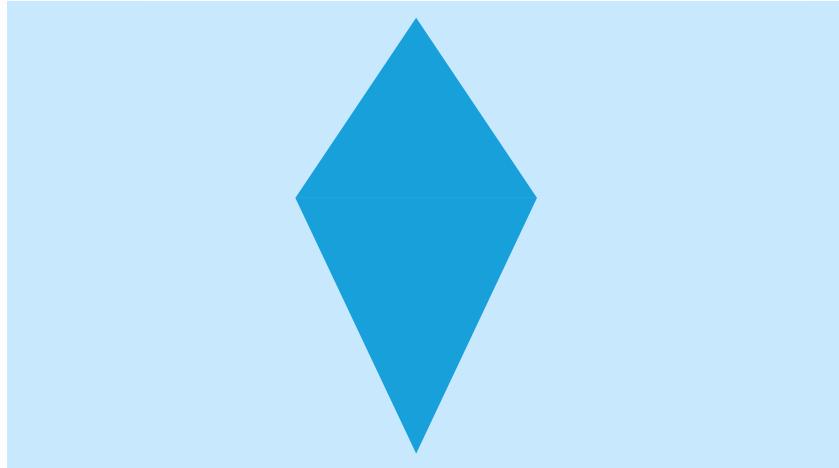
A kite has two equal angles.

A kite has four right angles.

A kite has two equal obtuse angles.

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?

A right angle is 90° .

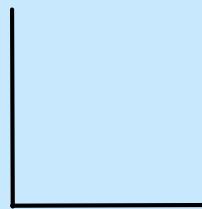
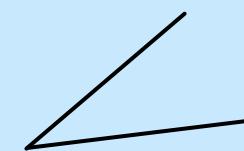
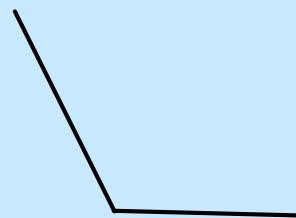
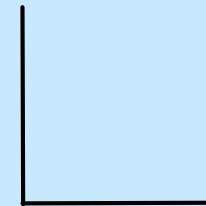
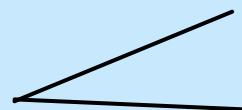
An obtuse angle is greater than 90° but smaller than 180° .

An acute angle is smaller than 90° .

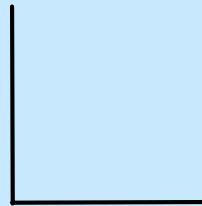
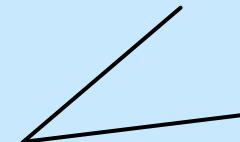
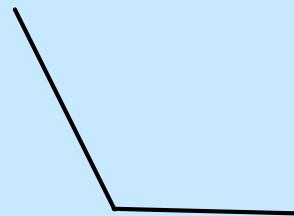
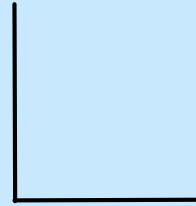
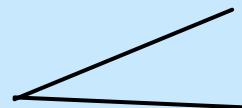
Using these facts, what is the smallest number of degrees you could add to 45° to make an obtuse angle? How do you know?

46 ° The smallest obtuse
angle must be 91° and $45 + 46$
 $= 91^\circ$.

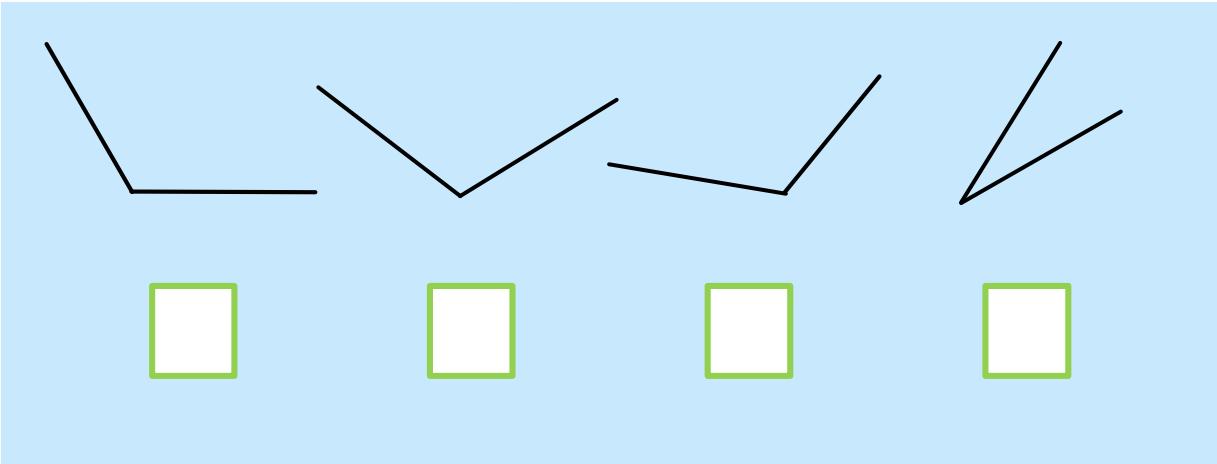
Use the greater than and less than symbols to compare these angles:



Use the greater than and less than symbols to compare these angles:

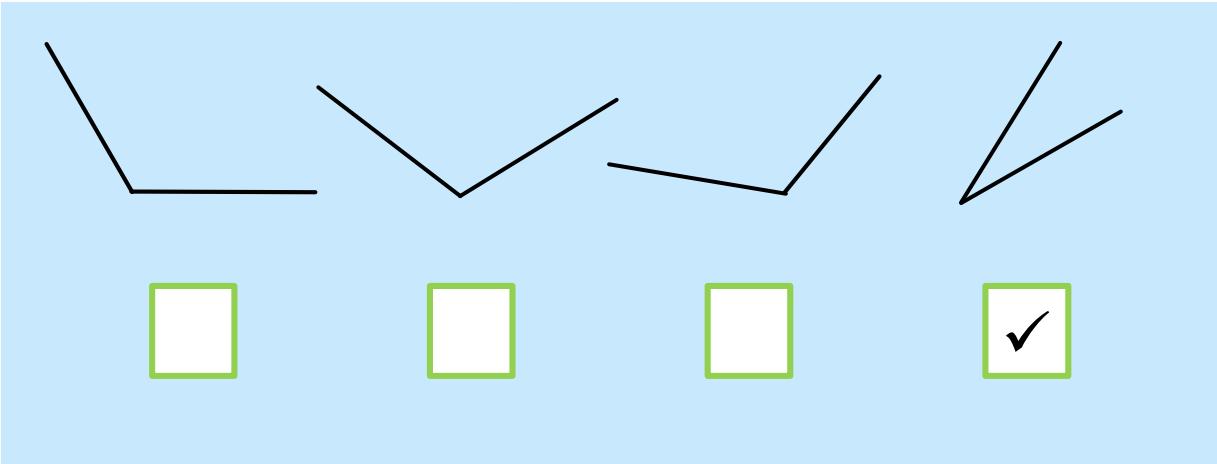


Which angle is the odd one out?



Explain your choice.

Which angle is the odd one out?



The rest are obtuse angles

Tasks

Hard	Harder
Label angels	Label and order angles sheet
Hardest	Herculean
Label and order angles sheet	Label and order angles sheet