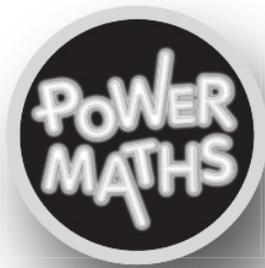


White Rose Maths Edition

Year 5 Practice Book 5C





Year 5 Practice Book

5C



White Rose Maths Edition



Draw 3 things that are
in your classroom.

What 3D shapes can
you find?

This book belongs to _____ .

My class is _____ .

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This looks like a good challenge!



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It is time to do some practice!



How to use this book

How does this Practice Book work?



Use the **Textbook** first to learn how to solve this type of problem.

Unit 12: Geometry – properties of shapes, Lesson 1

Understand and use degrees

Discover

Share

a) A 360-degree turn is a whole turn. A 180-degree turn is a half turn.

We measure turns in degrees. The ° symbol means degrees.

Lexi starts facing Reena. After a 180-degree turn Lexi will be facing Leo.

b) A 90-degree turn is a quarter turn.

This is also called a right angle.

Lexi starts facing Leo. Lexi could turn 90° clockwise or 90° anticlockwise. She could be facing the flowers or the bench now.

Unit 12: Geometry – properties of shapes, Lesson 1

Date: _____

Understand and use degrees

1 a) Tick the diagrams that show a 180° turn.

b) Tick the diagrams that show a 90° turn.

c) Describe each turn using degrees, and 'clockwise' or 'anticlockwise'.

i) _____

ii) _____

iii) _____

iv) _____

v) _____

vi) _____

This shows you which **Textbook** page you need.

Have a go at questions by yourself using this **Practice Book**. Use what you have learnt.



Challenge questions make you think hard!



Questions with this light bulb make you think differently.

Reflect

Each lesson ends with a **Reflect** question so you can think about what you have learnt.

Use **My power points** at the back of this book to keep track of what you have learnt.



Reflect

Draw diagrams to show turns of 90° , 180° , 270° and 45° .

8

My journal

At the end of a unit your teacher will ask you to fill in **My journal**.

This will help you show how much you can do now that you have finished the unit.

Unit 12: Geometry – properties of shapes

Date: _____

End of unit check

My journal

a

d

f

b

e

g

c

a) Which angles could fit together to form a whole turn?

b) Which angles could fit together to form a straight line?

Unit 12: Geometry – properties of shapes

2 Use measuring and calculation to find the angles where the shaded square touches the larger square.

a = °

b = °

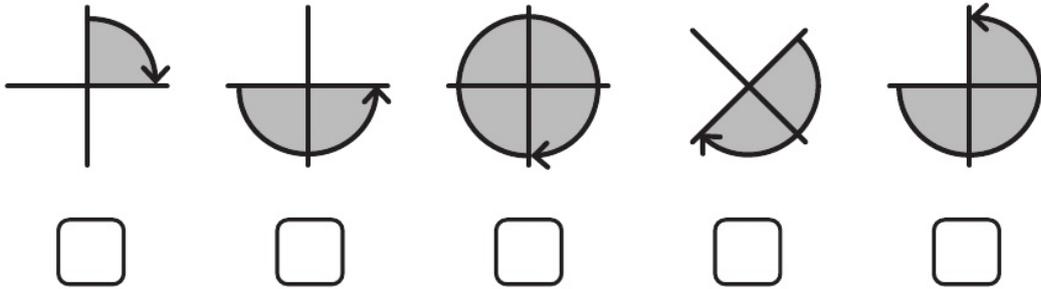
What do you notice?

Power check

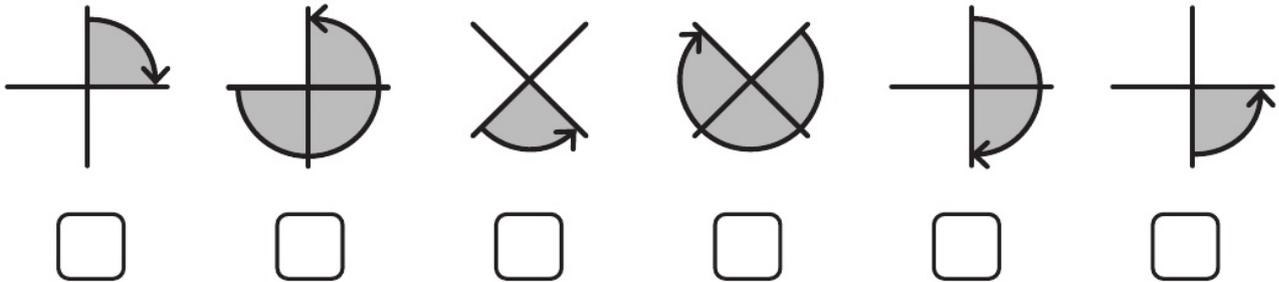
How do you feel about your work in this unit?

Understand and use degrees

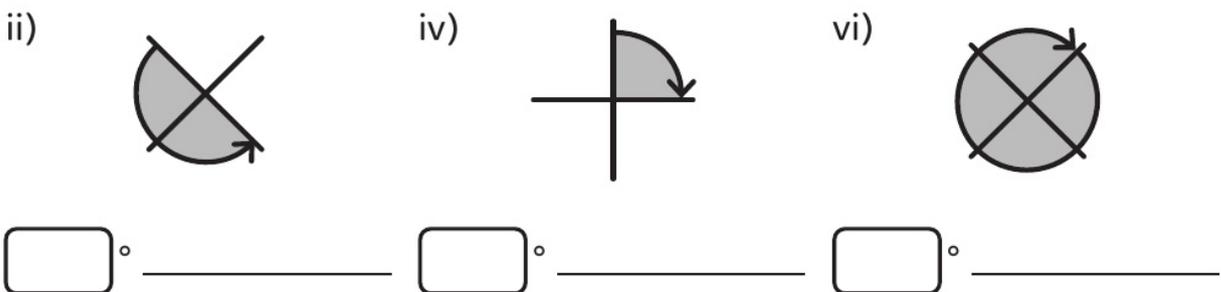
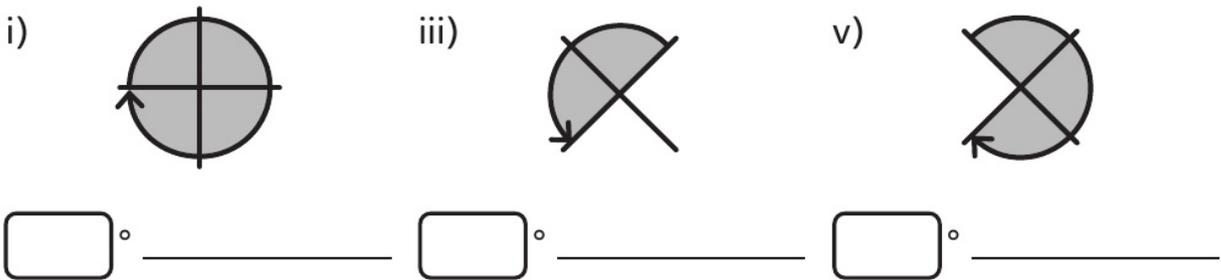
I a) Tick the diagrams that show a 180° turn.



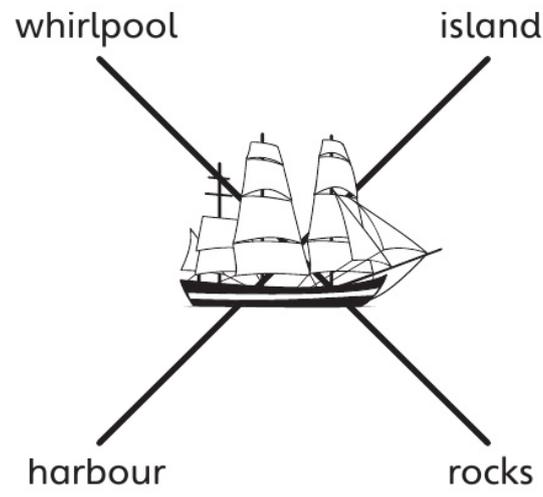
b) Tick the diagrams that show a 90° turn.



c) Describe each turn using degrees, and 'clockwise' or 'anticlockwise'.



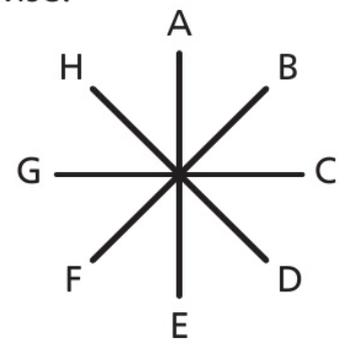
2 Complete the table for the different turns the ship makes.



Starts facing	Turns	Now facing
whirlpool	90° clockwise	
harbour	180° clockwise	
island	<input type="text"/> ° anticlockwise	rocks
	360°	island
	270° clockwise	whirlpool

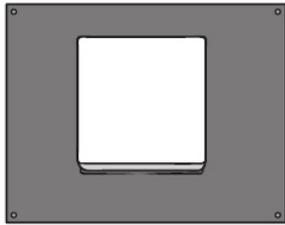
3 Describe each turn in degrees, clockwise or anticlockwise.

- a) Turn from B to F ° _____
- b) Turn from H to B ° _____
- c) Turn from C to D ° _____
- d) Turn from D to A ° _____

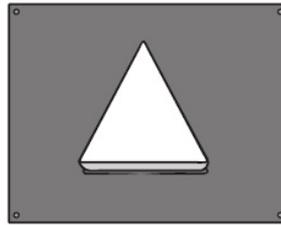




4 A robot has two buttons.



This button makes the robot turn 270° clockwise.

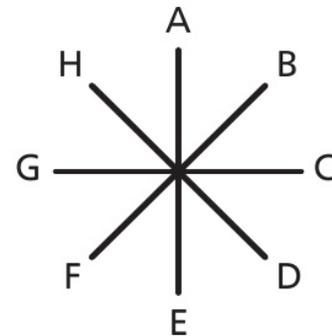


This button makes it turn 45° anticlockwise.

The robot is facing C and needs to face D.

Describe different combinations of button pushes you could use to make the robot complete this turn.

Which combination requires the fewest button pushes?



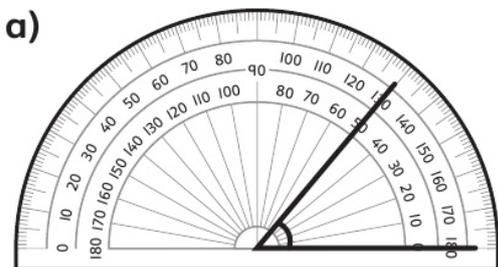
Reflect

Draw diagrams to show turns of 90° , 180° , 270° and 45° .

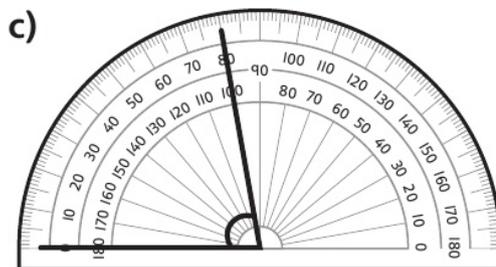
-
-
-
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Measure acute angles

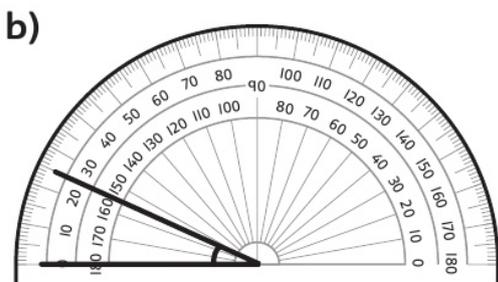
1 How many degrees is each angle?



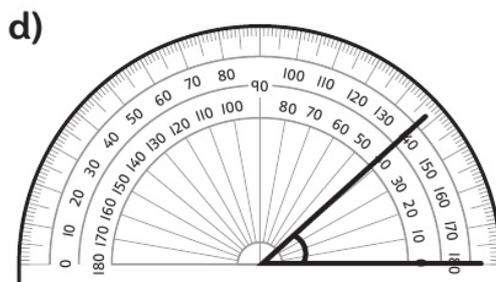
°



°

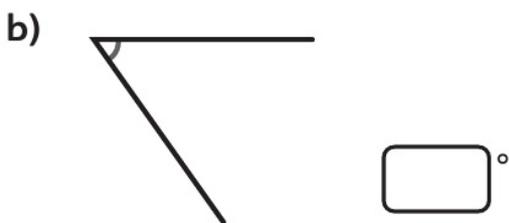
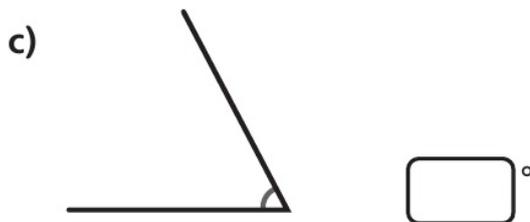


°



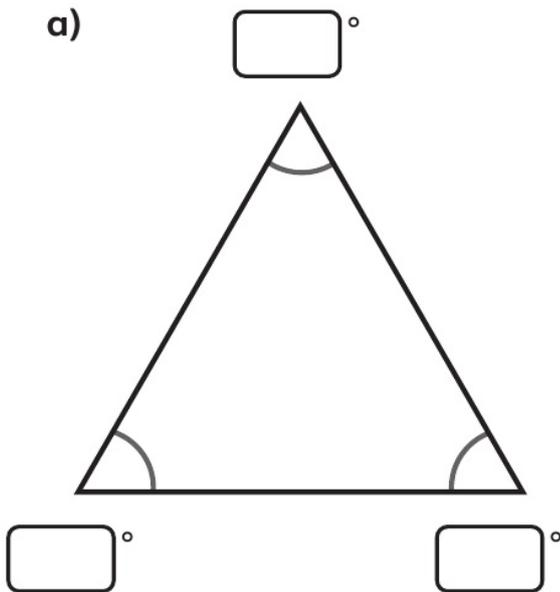
°

2 Measure each angle using a protractor.

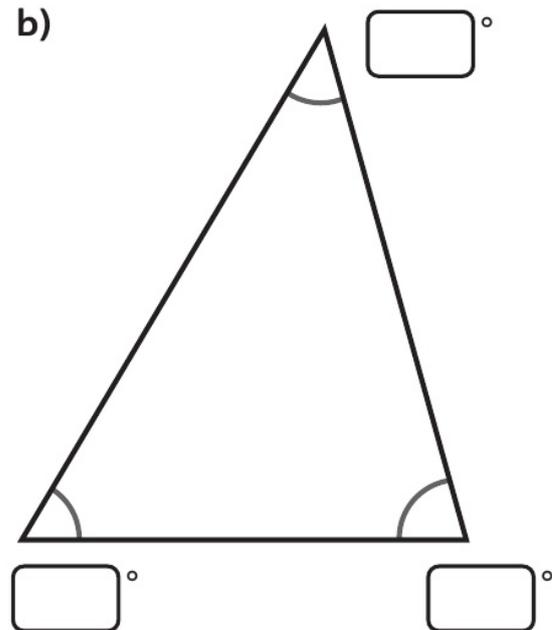


3 Measure the angles in these triangles.

a)



b)



4 Explain the mistakes Richard and Emma have made.

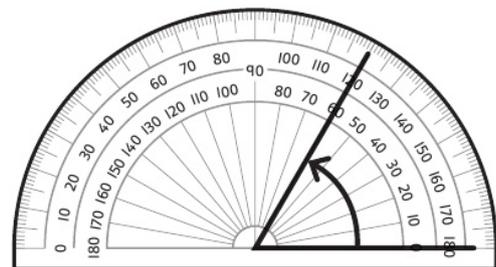


a)

Richard



This angle is 120°.

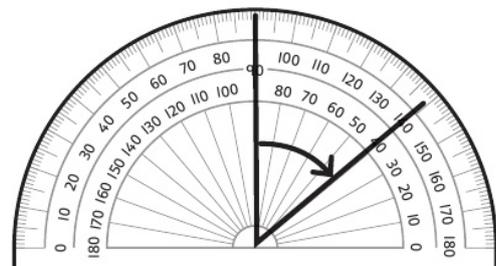


b)

Emma



This angle is 40°.



CHALLENGE

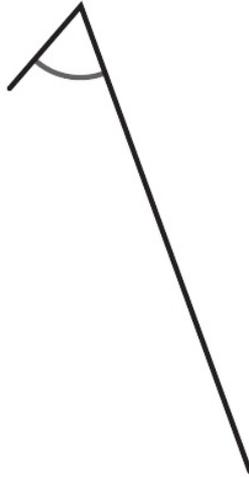
- 5 Isla says, 'I cannot measure these angles because some of the lines are too short.'

Find a way to measure these angles accurately and write the measurement beneath each angle.

a)


°

b)


°

c)


°

Reflect

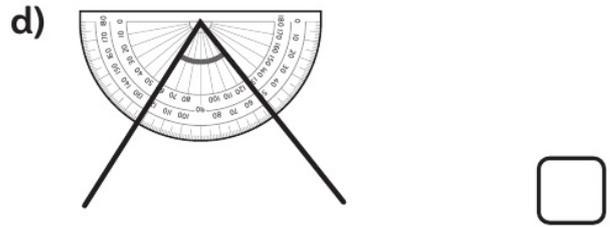
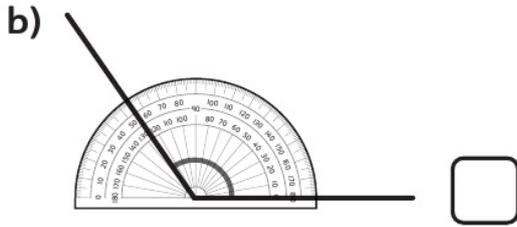
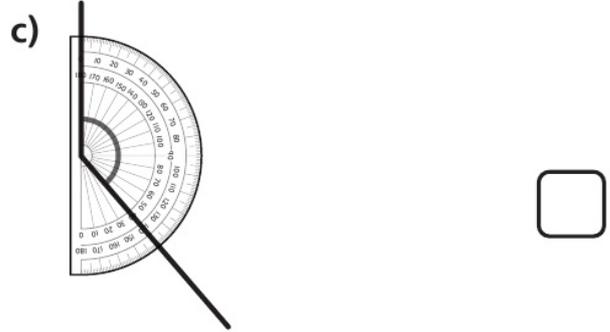
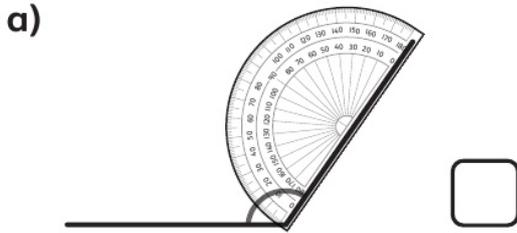
Explain the most important steps when measuring an angle with a protractor.



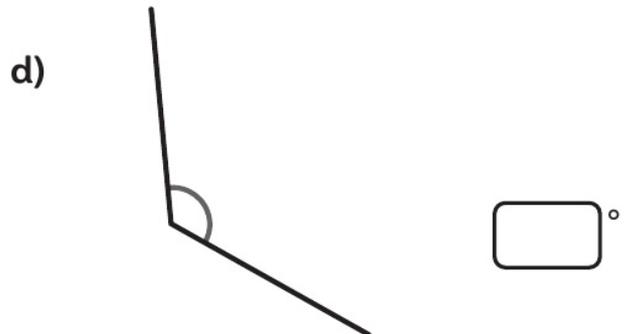
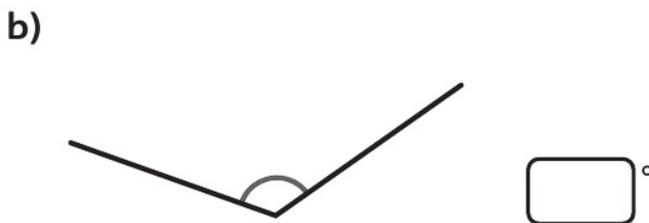
Measure angles up to 180°

→ **Textbook 5C p16**

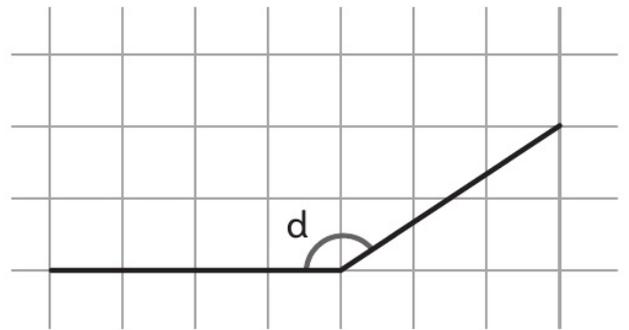
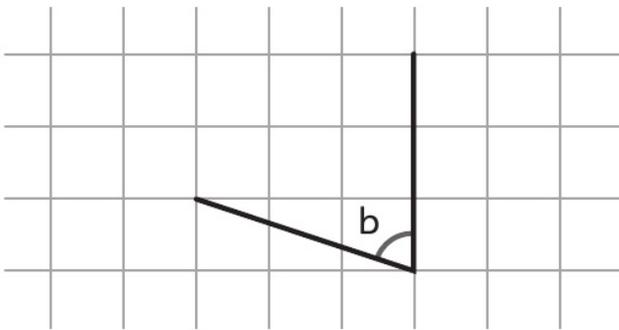
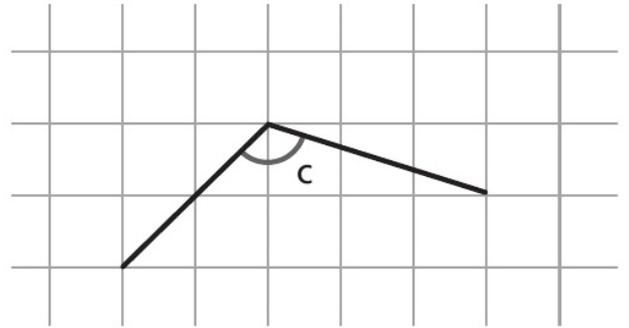
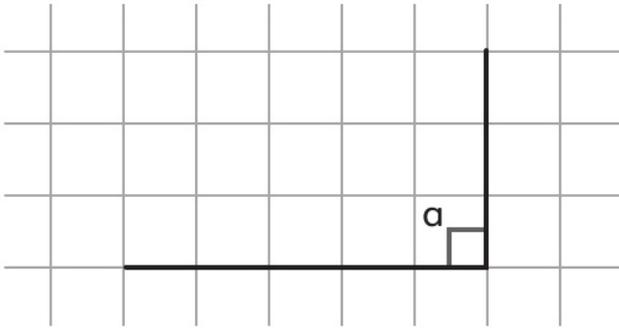
1 Tick the protractors that have been placed correctly on the angles.



2 Measure these angles accurately using a protractor.

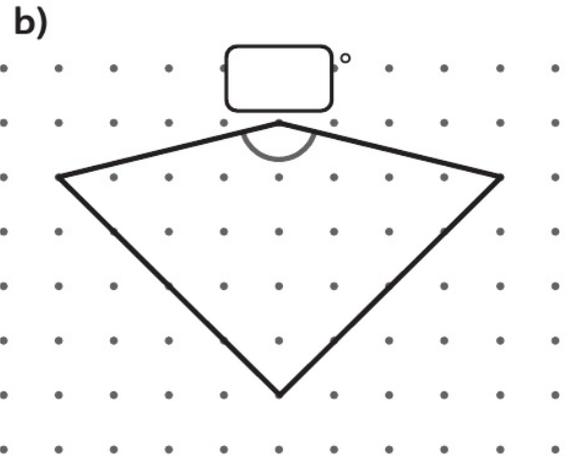
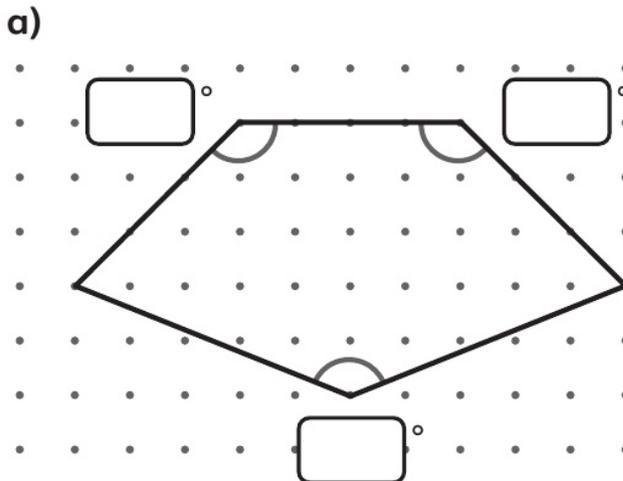


3 Put these angles in order, from greatest to smallest.



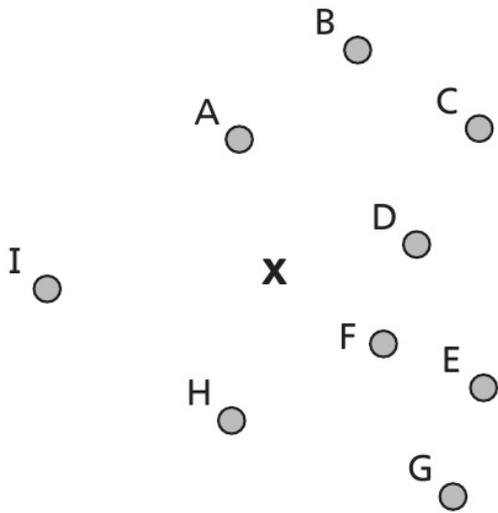
Greatest angle Smallest angle

4 Measure the obtuse angles in these shapes.





- 5 Max stands at marker X. He turns to face different markers. Measure the angles he turns and complete the table.



Turns clockwise from:	Angle of turn
A to F	
F to I	
I to B	
B to G	
G to I	

Reflect

How do you know which scale to read on a protractor when measuring an obtuse angle?

- _____
- _____
- _____
- _____

Draw lines and angles accurately

1 Complete the angles by adding another line.

a) Draw a 60° angle.



c) Draw a 30° angle.



b) Draw a 120° angle.



d) Draw a 90° angle.



2 Draw three different 45° angles.

