

GCSE Boot Camp

Foundation Maths Week 7 Workbook

Questions



GCSE Boot Camp

Topics

It's week 7 of your 8 week GCSE Boot Camp!

Every week you'll get a practice workbook to work through a range of topics, taken from our GCSE Foundation Advanced course.

We've also included links to 2 of our expert tutorial videos on some of these exact questions. That way, if you get stuck, you can try watching one of our tutorial videos with our Maths expert Patricia.

For full access to all of the corresponding videos sign up for a SchoolOnline subscription from £8.99 a month.

In next week's email we'll send you the answers to this workbook to download **PLUS** a your final workbook to practice everything you have learnt over the course of this boot camp.

Your week 7 workbook topics are:

- Angles and Geometry
- Estimates

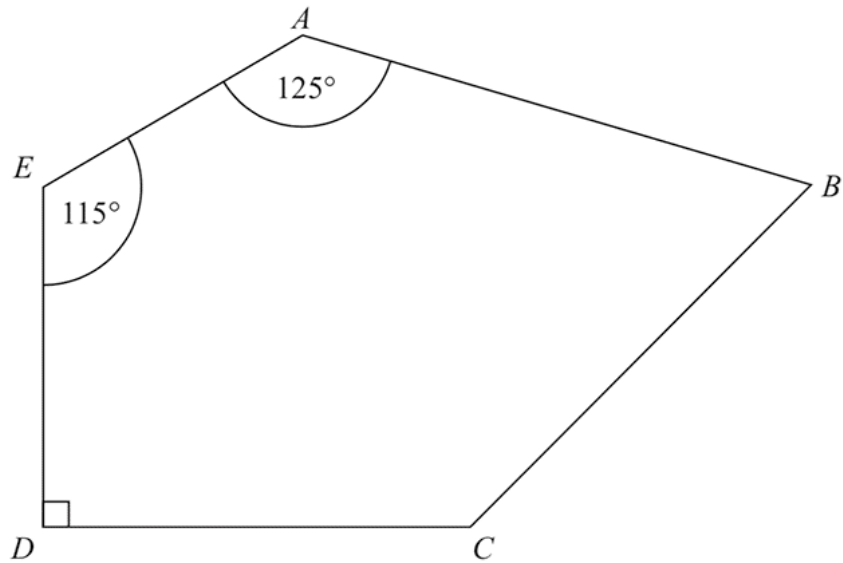


GCSE Foundation Maths - Angles and Geometry 2

Angles in Polygons

June 2018 Foundation Calc Paper 3

26 $ABCDE$ is a pentagon.

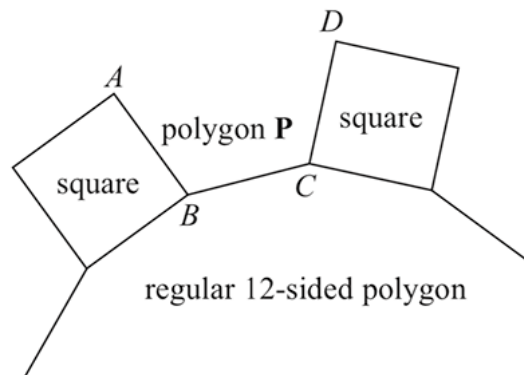


Angle $BCD = 2 \times$ angle ABC

Work out the size of angle BCD .
You must show all your working.

June 2017 Foundation Calc Paper 3

19 In the diagram, AB , BC and CD are three sides of a regular polygon **P**.

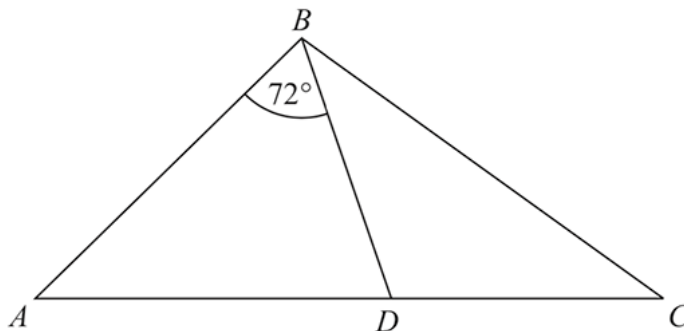


Show that polygon **P** is a hexagon.
You must show your working.

(Total for Question 19 is 4 marks)

Sample B Foundation Calc Paper 2

29



ABC is an isosceles triangle with $BA = BC$.

D lies on AC .

ABD is an isosceles triangle with $AB = AD$.

Angle $ABD = 72^\circ$

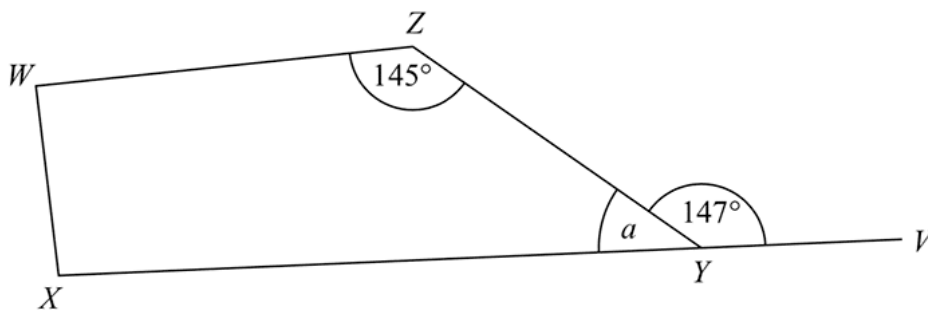
Show that the triangle BCD is isosceles.

You must give a reason for each stage of your working.

(Total for Question 29 is 5 marks)

Sample A Foundation Calc Paper 3

13



$WXYZ$ is a quadrilateral.
 XYV is a straight line.

(a) (i) Find the size of the angle marked a .

.....
○

(ii) Give a reason for your answer.

.....
(2)

Angle $ZWX =$ angle WXY

(b) Work out the size of angle ZWX .

.....
○

(2)

(Total for Question 13 is 4 marks)

GCSE Boot Camp

Expert tutorial

GCSE MATHEMATICS
PAPER 3 (Calculator)

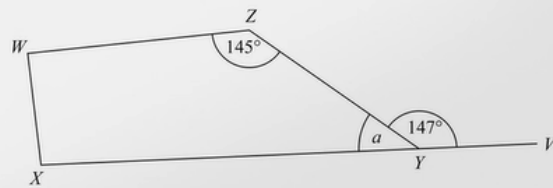
13

$WXYZ$ is a quadrilateral.
 XYV is a straight line.

- (a) (i) Find the size of the angle marked a .
(ii) Give a reason for your answer.

Angle $ZWX =$ angle WXY

- (b) Work out the size of angle ZWX .



(a) Angles on a straight line = 180

Click to play!

Need some extra help? That's what we're here for!

In this video Patricia will explain how to answer the last question on the Angles and Geometry section of your workbook (Q13).

Grab your pen and paper and remember to take notes! If you want more access to awesome videos like this, [sign up for a full SchoolOnline subscription here.](#)

GCSE Foundation Maths - Estimates

Estimating

June 2018 Foundation Non-Calc Paper 1

22 A cycle race across America is 3069.25 miles in length.

Juan knows his average speed for his previous races is 15.12 miles per hour.
For the next race across America he will cycle for 8 hours per day.

(a) Estimate how many days Juan will take to complete the race.

.....
(3)

Juan trains for the race.
The average speed he can cycle at increases.
It is now 16.27 miles per hour.

(b) How does this affect your answer to part (a)?

.....
.....
(1)

(Total for Question 22 is 4 marks)

Estimates

Sample A Foundation Non-Calc Paper 1

13 Paul organised an event for a charity.

Each ticket for the event cost £19.95

Paul sold 395 tickets.

Paul paid costs of £6000

He gave all money left to the charity.

(a) Work out an estimate for the amount of money Paul gave to the charity.

£.....

(3)

(b) Is your answer to (a) an underestimate or an overestimate?

Give a reason for your answer.

.....
.....
(1)

(Total for Question 13 is 4 marks)

Estimation

June 2017 Foundation Non-Calc Paper 1

13 The diagram shows a tree and a man.



The man is of average height.
The tree and the man are drawn to the same scale.

(a) Write down an estimate for the real height, in metres, of the man.

..... metres
(1)

(b) Find an estimate for the real height, in metres, of the tree.

..... metres
(2)

(Total for Question 13 is 3 marks)

GCSE Boot Camp

Expert tutorial



Need some extra help? That's what we're here for!

In this video Patricia will explain how to answer the last question on the Estimates section of your workbook (Q13).

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