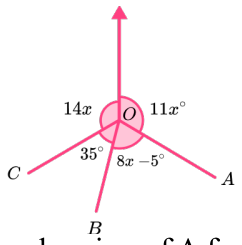
THIRD SPACE LEARNING

GCSE Exam Questions

Angles | Geometry & Measure

GCSE Exam Questions: Angles

1) **(a)** Persons A, B, and C are standing on the green of a golf course. The hole is at point O.



What is the three figure bearing of A from O?

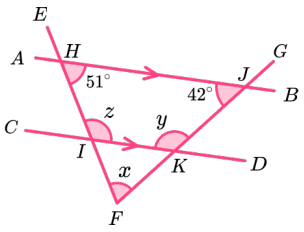
(4)

(b) What is the bearing of B from O?

(2)

(6 marks)

2) Using the diagram below, calculate the value of $y + z - x$.



(5 marks)

3) **(a)** The sum of interior angles for a polygon with n sides is 1800°.

Determine the number of sides of the polygon, n.

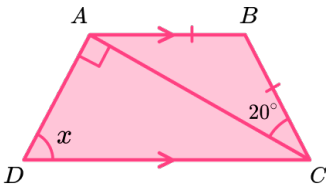
(3 marks)

GCSE Exam Questions: Angles

4) ABCD is a trapezium with the following properties:

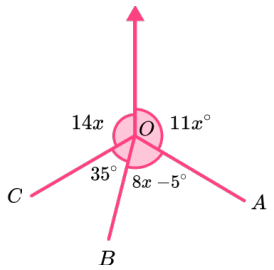
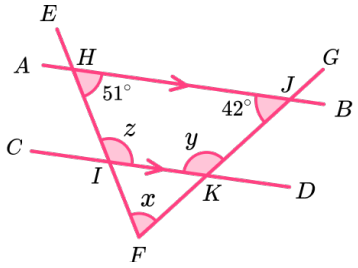
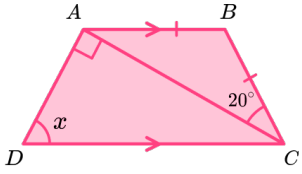
- AB is parallel to CD
- AB = BC
- Angle BCA = 20^o
- Triangle ACD is a right angle triangle.

Calculate the value of x. State any reasons in your working.



(3 marks)

GCSE Exam Questions: Angles Answers

	Question	Answer	Marks
1) (a)	Persons A, B, and C are standing on the green of a golf course. The hole is at point O.  What is the three figure bearing of A from O?	**(a)** $11x + 8x - 5 + 35 + 14x = 360$ $33x + 30 = 360$ $33x = 330$ $x = 10$ $11x = 110^o$	**(1)** **(1)** **(1)** **(1)**
(b)	What is the bearing of B from O?	**(b)** $8x - 5 = 8 \times 10 - 5 = 75$ $110 + 75 = 185^o$	**(1)** **(1)**
2)	Using the diagram below, calculate the value of $y + z - x$.  	$y = 180 - 42 = 138$ $z = 180 - 51 = 129$ FHJ is a triangle The sum of angles in a triangle is 180^o $x = 180 - (51 + 42) = 87$ $y + z - x = 138 + 129 - 87 = 180.$	**(1)** **(1)** **(1)** **(1)** **(1)**
3)	The sum of interior angles for a polygon with n sides is 1800^o. Determine the number of sides of the polygon, n.	$1800 = 180\ (n - 2)$ $10 = n - 2$ $n = 12$	**(1)** **(1)** **(1)**
4)	ABCD is a trapezium with the following properties: • AB is parallel to CD • AB=BC • Angle BCA = 20^o • Triangle ACD is a right angle triangle. Calculate the value of x.  	BAC = BCA = 20^o BAC = ACD (Alternate angles are equal) x = 180 - (90 + 20) = 70^o (The sum of angles in a triangle is 180^o).	**(1)** **(1)** **(1)**

Where to go next?

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