ENGLAND GCSE MATHS AQA FOUNDATION · UNIT 11 · 10 QUESTIONS

Geometry, Pythagoras, Trigonometry and Vectors — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **A ladder 5 m long leans against a wall. Its foot is 3 m from the wall. How high up the wall does it reach?**

- A 6
- B 7
- C 4
- D 3

Understand It with Pulse | Flag a mistake

2 **A kite string is 14 m long and makes an angle of 30° with the ground. The height of the kite is**

- A 7
- B 6
- C 8
- D 14

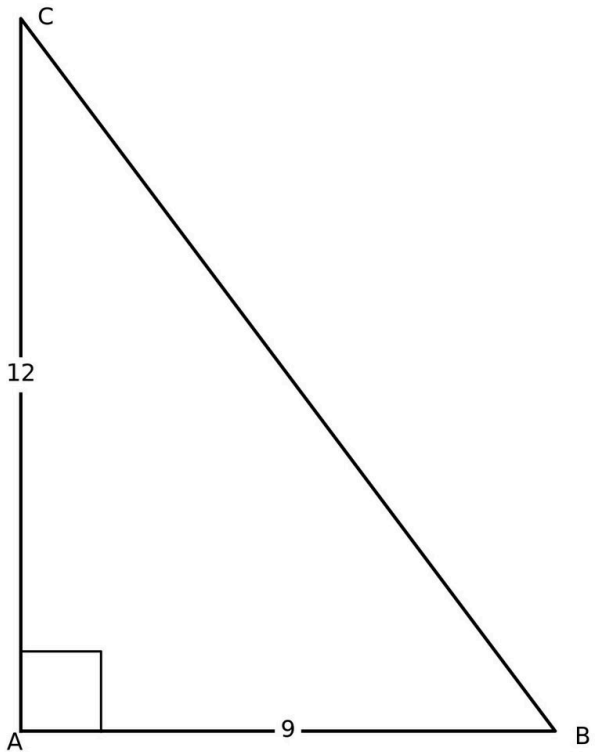
Understand It with Pulse | Flag a mistake

3 **A passenger aeroplane takes off at an angle of 30° and flies 400 m. Its height is**

- A 200
- B 400
- C 210
- D 190

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4 **A right-angled triangle has one side of length 9 cm and the other side of length 12 cm. The hypotenuse is**



- **A** 21 cm
- **B** 14 cm
- **C** 16 cm
- **D** 15 cm

Understand It with Pulse | **Flag a mistake**

5 The vector (3, 4) has magnitude

- A 5
- B 6
- C 4
- D 7

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6 In a right-angled triangle, the hypotenuse is 10 cm and one angle is 60°. The side next to the 60° angle is

- A 10 cm
- B 5 cm
- C 6 cm
- D 4 cm

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7 **In a right-angled triangle, one angle is 45° and the side next to it is 9 cm. The side opposite the 45° angle is**

- A 8 cm
- B 18 cm
- C 9 cm
- D 10 cm

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8 **A sailing ship sails 6 km east and then 8 km north. How far is it from its starting point?**

- A 9
- B 11
- C 14
- D 10

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9 **A brown dog walks 9 m east and then 12 m north. How far is it from its starting point?**

- A 21
- B 16
- C 14
- D 15

Understand It with Pulse | Flag a mistake

10 **The vector a = (1, 4) and the vector b = (2, 4). The vector a + b is**

- A (4, 8)
- B (3, 8)
- C (3, 0)
- D (-1, 0)

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ANSWER KEY

1.	C	**5.**	A	**9.**	D
2.	A	**6.**	B	**10.**	B
3.	A	**7.**	C		
4.	D	**8.**	D		

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