ENGLAND GCSE MATHS OCR 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 passenger aeroplane takes off at an angle of 30° and flies 100 m. Its height is**

- **A** 50
- **B** 60
- **C** 40
- **D** 100

Understand It with Pulse | Flag a mistake

2 **A ladder 15 m long leans against a wall. Its foot is 9 m from the wall. How high up the wall does it reach?**

- A 12
- B 17
- C 14
- D 9

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3 **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 9 cm
- B 8 cm
- C 10 cm
- D 18 cm

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4 The vector a = (3, 5) and the vector b = (3, 1). The vector a + b is

- A (0, 4)
- B (7, 6)
- C (6, 6)
- D (6, 4)

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5 A rocket climbs at an angle of 30° to the ground and travels 200 m. Its height is

- A 200
- B 90
- C 100
- D 110

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6 **A kite string is 10 m long and makes an angle of 30° with the ground. The height of the kite is**

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

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7 **In a right-angled triangle, the hypotenuse is 12 cm and one angle is 60°. The side next to the 60° angle is**

- A 12 cm
- B 7 cm
- C 6 cm
- D 5 cm

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8 **In a right-angled triangle, the hypotenuse is 14 cm and one angle is 30°. The side opposite the 30° angle is**

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

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9 **The vector (9, 12) has magnitude**

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

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10 **The vector a = (2, 3) and the vector b = (1, 5). The vector a + b is**

- **A** (3, 8)
- **B** (3, -2)
- **C** (1, -2)
- **D** (4, 8)

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ANSWER KEY

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

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