ENGLAND GCSE MATHS OCR FOUNDATION · UNIT 4 · 10 QUESTIONS

Algebra, Graphs — 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 bicycle path falls 2 m for every 3 m it goes across. The gradient of the path is**

- **A** -1
- **B** -2/3
- **C** -3/2
- **D** $\frac{2}{3}$

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2 A sunflower grows 6 cm every week. The gradient of its height-time graph is

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

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3 A kite string has gradient $\frac{2}{3}$. It goes 6 m across. How high is the kite?

- **A** 2
- **B** 4
- **C** 6
- **D** 8

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4 **The midpoint of the line joining (3, 2) and (5, 6) is**

A (4, 4)

B (3, 6)

C (1, 2)

D (5, 2)

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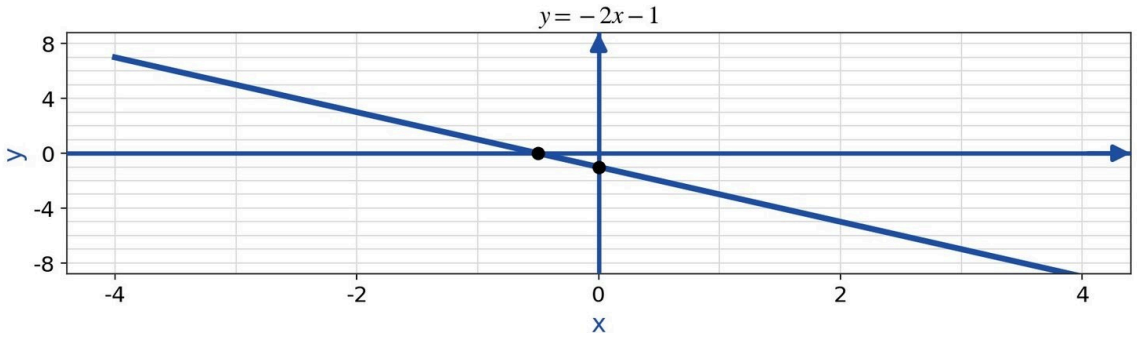
5 **The graph shows y = -2x - 1. The value of y when x = 2 is**



A -7

B -5

C -3

D -4

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6 A wooden footbridge rises 1 m over a run of 4 m. Its gradient is

- **A** $\frac{1}{2}$
- **B** 4
- **C** $\frac{1}{4}$
- **D** $\frac{1}{5}$

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7 A line is parallel to y = 3x - 2. The gradient of the parallel line is

- **A** 4
- **B** 3
- **C** $\frac{1}{3}$
- **D** -3

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8 The y-intercept of $y = 3x - 5$ is

- **A** -2
- **B** -5
- **C** 5
- **D** 3

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9 A passenger aeroplane climbs 300 m for every 2000 m it travels forwards. The gradient of its flight path is

- **A** $\frac{3}{20}$
- **B** $\frac{20}{3}$
- **C** $\frac{1}{10}$
- **D** $\frac{1}{5}$

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10 **A line is perpendicular to y = 1/4x + -2. The gradient of the perpendicular line is**

A $\frac{1}{4}$

B -1/4

C 4

D -4

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ANSWER KEY

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

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