ENGLAND GCSE MATHS AQA 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 wooden footbridge rises 3 m over a run of 6 m. Its gradient is**

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

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

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

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3 **A straight line passes through (0, 2) and (3, 11). Its gradient is**

- **A** 4
- **B** $\frac{1}{3}$
- **C** 12
- **D** 3

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4 **A line is parallel to y = 3x + 3. The gradient of the parallel line is**

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

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5 **The midpoint of the line joining (3, 1) and (5, 3) is**

- **A** (4, 2)
- **B** (3, 3)
- **C** (1, 1)
- **D** (5, 1)

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6 **The y-intercept of y = -3x + 2 is**

A -3

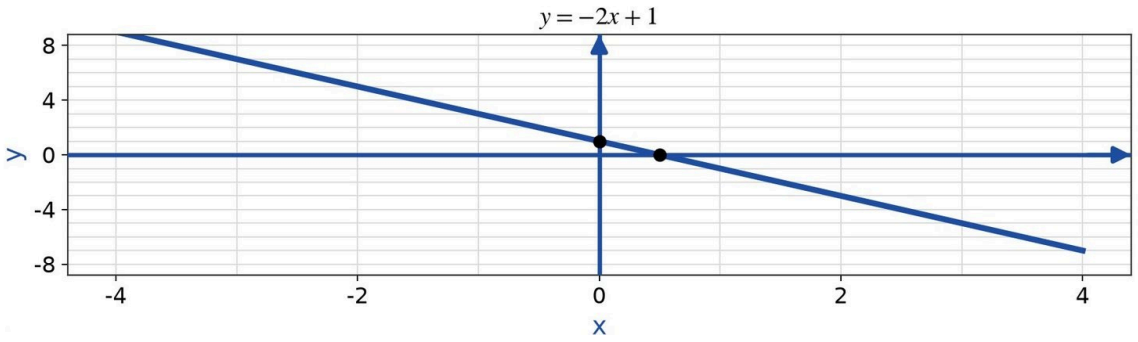
B -1

C -2

D 2

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7 **The graph below shows y = -2x + 1. The value of y when x = -3 is**



A 8

B 5

C 7

D 9

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8 **A passenger aeroplane climbs 600 m for every 2000 m it travels forwards. The gradient of its flight path is**

A $\frac{3}{10}$

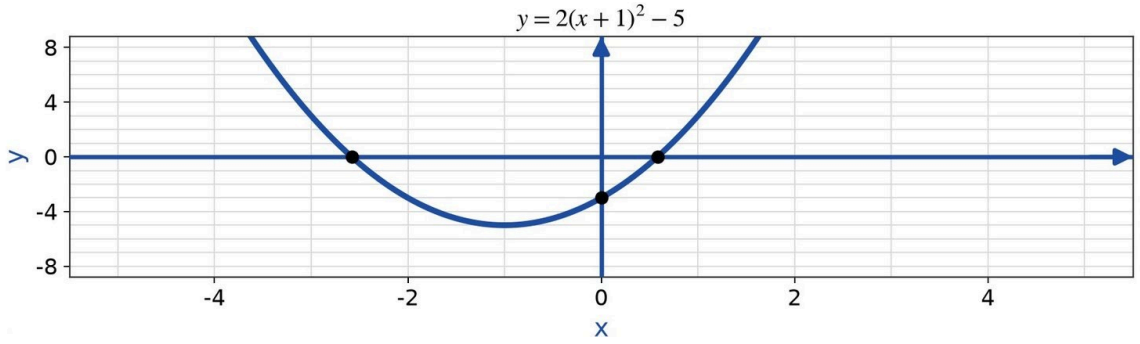
B $\frac{10}{3}$

C $\frac{7}{20}$

D $\frac{1}{5}$

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9 **The graph below shows y = 2(x + 1)² - 5. The vertex of the graph is**



A (-1, -5)

B (-2, -6)

C (-1, 5)

D (1, -5)

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10 **A ladder leans against a wall. It rises 5 m for every 4 m it goes across. The gradient of the ladder is**

A $\frac{3}{2}$

B $\frac{5}{4}$

C $\frac{4}{5}$

D 1

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ANSWER KEY

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

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