ENGLAND GCSE MATHS EDEXCEL 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 ladder leans against a wall. It rises 5 m for every 2 m it goes across. The gradient of the ladder is**

- **A** $\frac{2}{5}$
- **B** 3
- **C** $\frac{5}{2}$
- **D** $\frac{5}{3}$

Understand It with Pulse | Flag a mistake

2 **A sunflower grows 4 cm every week. The gradient of its height-time graph is**

A 3

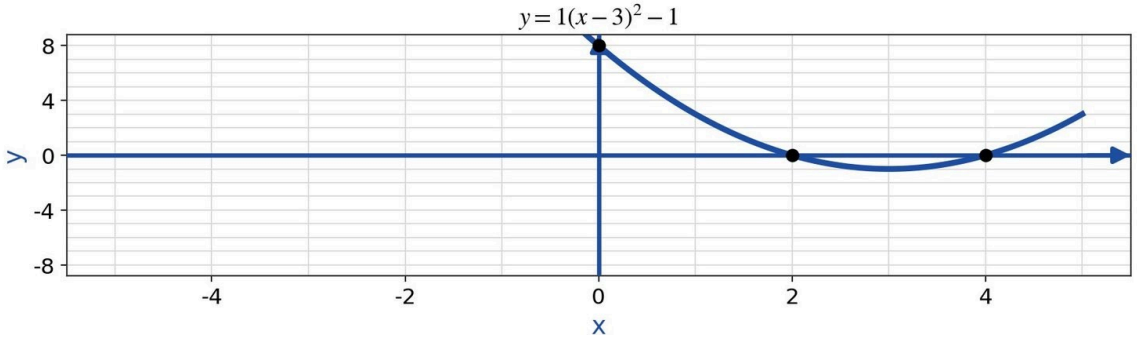
B 4

C 8

D 5

Understand It with Pulse | Flag a mistake

3 **The graph shows y = (x - 3)² - 1. The vertex of the graph is**



A (3, 1)

B (2, -2)

C (-3, -1)

D (3, -1)

Understand It with Pulse | Flag a mistake

4 A passenger aeroplane climbs 300 m for every 5000 m it travels forwards. The gradient of its flight path is

- **A** $\frac{50}{3}$
- **B** $\frac{2}{25}$
- **C** $\frac{1}{20}$
- **D** $\frac{3}{50}$

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

6 **A kite string has gradient $\frac{3}{2}$. It goes 8 m across. How high is the kite?**

- A 15
- B 9
- C 8
- D 12

Understand It with Pulse | Flag a mistake

7 **The y-intercept of y = 2x - 5 is**

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

Understand It with Pulse | Flag a mistake

8 **A line is perpendicular to y = 1/4x + 0. The gradient of the perpendicular line is**

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

Understand It with Pulse | Flag a mistake

9 **A bicycle path falls 3 m for every 4 m it goes across. The gradient of the path is**

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

Understand It with Pulse | Flag a mistake

10 **For the equation y = 3x + 2, the value of y when x = 5 is**

- **A** 17
- **B** 20
- **C** 14
- **D** 13

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.