ENGLAND GCSE MATHS AQA HIGHER · UNIT 5 · 10 QUESTIONS

Algebra, Equations and Inequalities — 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 **Two hardcover books and one calculator cost £19. One hardcover book and two calculators cost £14. The cost of one calculator is**

A £2

B £4

C £8

D £3

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2 **A bicycle costs x pounds. After a £20 discount it costs £100. The value of x is**

- A £100
- B £120
- C £80
- D £130

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3 **Solve 8x - 3 = 13**

- A x = 5
- B x = 1
- C x = 3
- D x = 2

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4 **A sandwich costs x pounds. 4 sandwiches cost £24. The value of x is**

- A £7
- B £24
- C £6
- D £5

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5 **Solve $x^2 - 7x + 10 = 0$**

- A x = -2
- B x = -5 or x = -2
- C x = -5 or x = -1
- D x = 2 or x = 5

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6 **A guitar costs x pounds. Two guitars and a £10 case cost £110. The value of x is**

- A £45
- B £50
- C £100
- D £55

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7 **The formula v = u + at gives v = 12 when u = 8, a = 2 and t = 2. Rearrange the formula to make t the subject.**

- A t = v - u - a
- B t = v + u/a
- C t = v - u/a
- D t = (v - u) × a

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8 **A tennis ball costs x pounds. A tube of 4 tennis balls costs £12. The value of x is**

- A £3
- B £12
- C £4
- D £2

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9 **Use the quadratic formula to solve $x^2 - 6x + 8 = 0$. Give the larger solution.**

- A x = 5
- B x = 3
- C x = 2
- D x = 4

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10 **Write $x^2 + 4x + 6$ in the form $(x + p)^2 + q$**

A $(x + 2)^2 + 2$

B $(x - 2)^2 + 2$

C $(x + 2)^2 - 2$

D $(x + 2)^2 + 6$

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ANSWER KEY

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

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