QUADRATIC FUNCTIONS - PRACTICE TEST | NEW BRUNSWICK FOUNDATIONS OF MATHEMATICS 110 · UNIT D · 25 QUESTIONS

Quadratic Functions — 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 **The quadratic with roots 2 and 3 has its larger root equal to**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **The quadratic $x^2 + 5x + 6$ factors with roots whose product is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **A parabola has vertex x coordinate 2. Its axis of symmetry is x equals**

ANSWER _____

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4

A quadratic with discriminant equal to zero has

A two real roots

B one real root

C no real roots

D four real roots

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5

A quadratic with discriminant greater than zero has

A two real roots

B one real root

C no real roots

D three real roots

Understand It with Pulse | Flag a mistake

6 **A quadratic with discriminant less than zero has**

A one real root

B two real roots

C three real roots

D no real roots

Understand It with Pulse | Flag a mistake

7 **Factoring $x^2 - 9$ gives**

A $(x - 3)(x + 3)$

B $(x - 9)(x + 9)$

C $x^2 - 3$

D $(x - 3)^2$

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8 **The axis of symmetry of a parabola passes through its**

A intercept only

B focus only

C vertex

D endpoint

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9 **The graph of a quadratic function is a**

A straight line

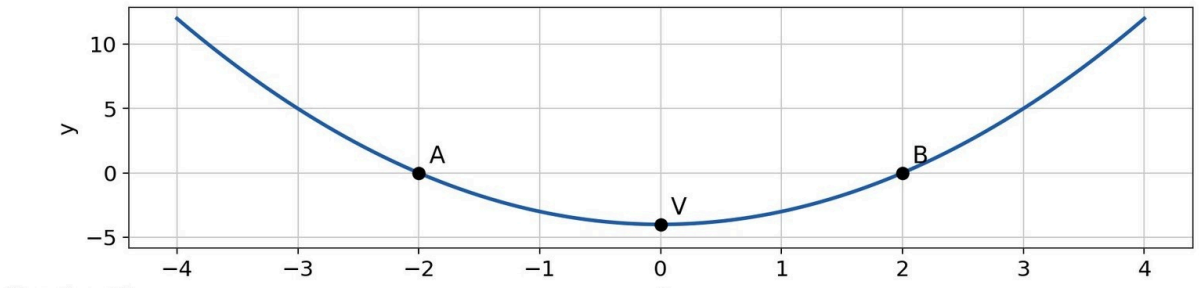
B circle

C parabola

D hyperbola

Understand It with Pulse | Flag a mistake

10 **The graph shows $y = x^2 - 4$. The vertex of the parabola is the point labelled**



A V

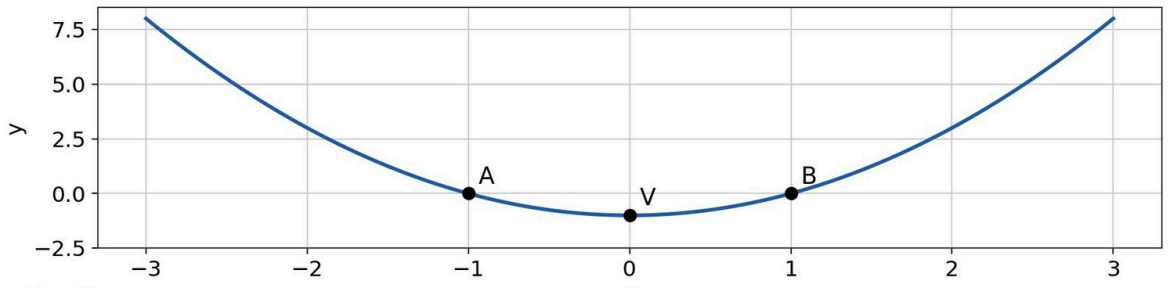
B A

C B

D none of these

Understand It with Pulse | Flag a mistake

11 **The graph shows $y = x^2 - 1$. The y intercept of the parabola is**



- **A** 0
- **B** -1
- **C** 1
- **D** 2

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12 **The value of $y = x^2 + 2x + 1$ when $x = 3$ is**

ANSWER _____

Understand It with Pulse | Flag a mistake

13 **The quadratic with roots -1 and 4 has its larger root equal to**

ANSWER _____

Understand It with Pulse | Flag a mistake

14 **The quadratic $x^2 - 5x + 6$ factors with roots whose product is**

ANSWER _____

Understand It with Pulse | Flag a mistake

15 **A parabola has vertex x coordinate -1. Its axis of symmetry is x equals**

ANSWER _____

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16 **The quadratic with roots 1 and 5 has its larger root equal to**

ANSWER _____

Understand It with Pulse | Flag a mistake

17 **The quadratic $x^2 + 3x + 2$ factors with roots whose product is**

ANSWER _____

Understand It with Pulse | Flag a mistake

18 **A parabola has vertex x coordinate 1. Its axis of symmetry is x equals**

ANSWER _____

Understand It with Pulse | Flag a mistake

19 **The quadratic with roots -2 and -3 has its larger root equal to**

ANSWER _____

Understand It with Pulse | Flag a mistake

20 **The quadratic $x^2 - 7x + 12$ factors with roots whose product is**

ANSWER _____

Understand It with Pulse | Flag a mistake

21 **The quadratic with roots 0 and 4 has its larger root equal to**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 The quadratic $x^2 + 7x + 10$ factors with roots whose product is

ANSWER _____

Understand It with Pulse | Flag a mistake

23 The quadratic with roots 3 and 6 has its larger root equal to

ANSWER _____

Understand It with Pulse | Flag a mistake

24 The quadratic $x^2 - 3x - 4$ factors with roots whose product is

ANSWER _____

Understand It with Pulse | Flag a mistake

25 The quadratic with roots 5 and 8 has its larger root equal to

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. 3
2. 6
3. 2
4. B
5. A
6. D
7. A
8. C
9. C
10. A
11. B
12. 16
13. 4
14. 6
15. -1
16. 5
17. 2
18. 1
19. -2
20. 12
21. 4
22. 10
23. 6
24. -4
25. 8

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