SASKATCHEWAN PRE-CALCULUS 20 · UNIT C

Quadratic Functions and Equations — Practice Test

Saskatchewan Pre-Calculus 20 • 25 questions

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 $1x^2 - 5x + 1 = 0$ has**

- **A** one real root
- **B** no real roots
- **C** two complex roots
- **D** two real roots

Understand It with Pulse | Flag a mistake

2 **The roots of (x - 1)(x + 1) = 0 are**

A 1 and -1

B -1 and 1

C 1 and 1

D -1 and -1

Understand It with Pulse | Flag a mistake

3 **The vertex of $y = (x + 2)^2 + 2$ is**

A (2, 2)

B (-2, 2)

C (-2, -2)

D (2, -2)

Understand It with Pulse | Flag a mistake

4 **The axis of symmetry of $y = x^2 - 8x + 1$ is x =**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **The equation $x^2 + 8x + 16 = 0$ has a repeated root . The root is**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **Solve : $x^2 - 64 = 0$. The positive root is**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **The quadratic $3x^2 + 2x - 4 = 0$ has**

A one real root

B no real roots

C two real roots

D two complex roots

Understand It with Pulse | Flag a mistake

8 **The roots of $(x + 4)(x + 3) = 0$ are**

A 4 and 3

B -4 and 3

C -4 and -3

D 4 and -3

Understand It with Pulse | Flag a mistake

9 The vertex of $y = (x + 3)^2 - 4$ is

- A (3, -4)
- B (-3, 4)
- C (3, 4)
- D (-3, -4)

Understand It with Pulse | Flag a mistake

10 The axis of symmetry of $y = x^2 - 10x + 1$ is $x =$

ANSWER _____

Understand It with Pulse | Flag a mistake

11 The equation $x^2 + 6x + 9 = 0$ has a repeated root . The root is

ANSWER _____

Understand It with Pulse | Flag a mistake

12 **Solve : $x^2 - 81 = 0$. The positive root is**

ANSWER

Understand It with Pulse | Flag a mistake

13 **The quadratic $3x^2 - 1x - 5 = 0$ has**

A two real roots

B one real root

C no real roots

D two complex roots

Understand It with Pulse | Flag a mistake

14 **The roots of (x - 5)(x + 6) = 0 are**

- A 5 and -6
- B -5 and 6
- C 5 and 6
- D -5 and -6

Understand It with Pulse | Flag a mistake

15 **The vertex of $y = (x - 4)^2 + 2$ is**

- A (-4, 2)
- B (4, -2)
- C (4, 2)
- D (-4, -2)

Understand It with Pulse | Flag a mistake

16 **The axis of symmetry of $y = x^2 - 6x + 1$ is x =**

ANSWER _____

Understand It with Pulse | Flag a mistake

17 **The equation $x^2 + 4x + 4 = 0$ has a repeated root . The root is**

ANSWER _____

Understand It with Pulse | Flag a mistake

18 **The quadratic $2x^2 + 3x - 5 = 0$ has**

A one real root

B two real roots

C no real roots

D two complex roots

Understand It with Pulse | Flag a mistake

19 **The roots of (x - 1)(x + 5) = 0 are**

A -1 and 5

B 1 and -5

C 1 and 5

D -1 and -5

Understand It with Pulse | Flag a mistake

20 **The vertex of $y = (x + 4)^2 + 5$ is**

A (4, 5)

B (-4, -5)

C (4, -5)

D (-4, 5)

Understand It with Pulse | Flag a mistake

21 **The axis of symmetry of $y = x^2 - 4x + 1$ is x =**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **The equation $x^2 + 10x + 25 = 0$ has a repeated root . The root is**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **The quadratic $2x^2 - 3x - 1 = 0$ has**

A two real roots

B one real root

C no real roots

D two complex roots

Understand It with Pulse | Flag a mistake

24 **The roots of $(x + 2)(x - 5) = 0$ are**

- A 2 and -5
- B -2 and 5
- C -2 and -5
- D 2 and 5

Understand It with Pulse | Flag a mistake

25 **The vertex of $y = (x + 3)^2 + 5$ is**

- A (-3, 5)
- B (3, 5)
- C (-3, -5)
- D (3, -5)

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.