SASKATCHEWAN PRE-CALCULUS 30 · UNIT D

Polynomial, Radical and Rational Functions — Practice Test

Saskatchewan Pre-Calculus 30 • 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 **By the factor theorem, x minus 3 is a factor of P(x) if**

- **A** P of 3 equals 1
- **B** P of 3 equals 0
- **C** P of 0 equals 3
- **D** the degree is 3

Understand It with Pulse | Flag a mistake

2 **Solve : the square root of x = 5 . The value of x is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **The domain of y = the square root of x - 3 is**

- A x > 3
- B x ≥ 3
- C x ≤ 3
- D x ≥ -3

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4 **The domain of y = the square root of x - 8 is**

- A x > 8
- B x ≤ 8
- C x ≥ 8
- D x ≥ -8

Understand It with Pulse | Flag a mistake

5 **A polynomial of degree 5 has at most how many x-intercepts**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **By the factor theorem, x minus (-5) is a factor of P(x) if**

A P of -5 equals 1

B P of 0 equals -5

C the degree is 5

D P of -5 equals 0

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7 The function $y = \frac{1}{x - 9}$ has a vertical asymptote at x equals

A 9

B -9

C 0

D 10

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8 Solve : the square root of x = 4 . The value of x is

ANSWER _____

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9 **By the factor theorem, x minus (-1) is a factor of P(x) if**

- **A** P of -1 equals 1
- **B** P of -1 equals 0
- **C** P of 0 equals -1
- **D** the degree is 1

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10 **For $P(x) = x^2 + 4$, the value $P(4)$ is**

ANSWER _____

Understand It with Pulse | Flag a mistake

11 The function $y = \frac{1}{x - 5}$ has a vertical asymptote at x equals

- **A** -5
- **B** 0
- **C** 5
- **D** 6

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12 Solve : the square root of x = 8 . The value of x is

ANSWER _____

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13 For $P(x) = x^2 + 3$, the value $P(-5)$ is

ANSWER _____

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14 The domain of y = the square root of x - 9 is

- **A** x > 9
- **B** x ≤ 9
- **C** x ≥ -9
- **D** x ≥ 9

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15 A polynomial of degree 4 has at most how many x-intercepts

ANSWER _____

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16 Solve : the square root of x = 7 . The value of x is

ANSWER _____

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17 The function $y = \frac{1}{x - 7}$ has a vertical asymptote at x equals

A 7

B -7

C 0

D 8

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18 For $P(x) = x^2 + 4$, the value $P(-5)$ is

ANSWER _____

Understand It with Pulse | Flag a mistake

19 The function $y = \frac{1}{x - 3}$ has a vertical asymptote at x equals

- **A** -3
- **B** 3
- **C** 0
- **D** 4

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20 The domain of y = the square root of x - 5 is

- **A** $x > 5$
- **B** $x \leq 5$
- **C** $x \geq 5$
- **D** $x \geq -5$

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21 **The domain of y = the square root of x - 7 is**

- **A** x > 7
- **B** x ≤ 7
- **C** x ≥ -7
- **D** x ≥ 7

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22 **By the factor theorem, x minus (-2) is a factor of P(x) if**

- **A** P of -2 equals 0
- **B** P of -2 equals 1
- **C** P of 0 equals -2
- **D** the degree is 2

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23 The function $y = \frac{1}{x - 8}$ has a vertical asymptote at x equals

- **A** -8
- **B** 8
- **C** 0
- **D** 9

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24 For $P(x) = x^2 + 2$, the value $P(-4)$ is

ANSWER _____

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25 For $P(x) = x^2 + 4$, the value $P(1)$ is

ANSWER _____

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ANSWER KEY

1. B
2. 25
3. B
4. C
5. 5
6. D
7. A
8. 16
9. B
10. 20
11. C
12. 64
13. 28
14. D
15. 4
16. 49
17. A
18. 29
19. B
20. C
21. D
22. A
23. B
24. 18
25. 5

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