NEWFOUNDLAND AND LABRADOR MATHEMATICS 2200 · UNIT C · 25 QUESTIONS

Radical and Rational 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 value of the square root of 4 is**

ANSWER

Understand It with Pulse | Flag a mistake

2 **Written in simplest radical form, the square root of 72 is**



A $7\sqrt{2}$

B $6\sqrt{2}$

C $6\sqrt{3}$

D 72

Understand It with Pulse | Flag a mistake

3 The value excluded from the domain of $f(x) = \frac{1}{x - 5}$ is

- **A** x = -5
- **B** x = 0
- **C** x = 5
- **D** x = 1

Understand It with Pulse | Flag a mistake

4 Apply the definition carefully . For x not = 3 , (x^2 - 9) / (x - 3) simplifies to

- **A** x - 3
- **B** x + 9
- **C** x^2 + 3
- **D** x + 3

Understand It with Pulse | Flag a mistake

5 Solve $\sqrt{x + 1} = 3$ for x. The value of x is

ANSWER

Understand It with Pulse | Flag a mistake

6 Solve $\frac{1}{x} = \frac{1}{5}$ for x. The value of x is

ANSWER

Understand It with Pulse | Flag a mistake

7 **Check the definition first . The graph of y = 1 / (x - 2) has a vertical asymptote at**



A x equals 0

B y equals 2

C x equals 2

D y equals 0

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8 **Start from the definition . The graph of y = (2x + 1) / (x - 3) has a horizontal asymptote at**



A y equals 1

B y equals 3

C y equals 0

D y equals 2

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9 **The coefficient in simplest form of $2\sqrt{3} + 3\sqrt{3}$ is**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **The value of the square root of 3 times the square root of 12 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

11 **The value of $\frac{x + 2}{x - 1}$ when x = 4 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

12 **Recall the rule. When solving a radical equation, squaring both sides can introduce**

- **A** a second variable
- **B** a vertical asymptote
- **C** a horizontal asymptote
- **D** an extraneous root

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13 **Apply the rule . For x not = -2 , (x^2 - 4) / (x + 2) simplifies to**

- **A** x - 2
- **B** x + 2
- **C** x - 4
- **D** x^2 - 2

Understand It with Pulse | Flag a mistake

14 **The cube root of 64 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

15 **The value of the square root of 36 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

16 **Written in simplest radical form, the square root of 80 is**



A $5\sqrt{5}$

B $4\sqrt{6}$

C 80

D $4\sqrt{5}$

Understand It with Pulse | Flag a mistake

17 **The value excluded from the domain of $f(x) = \frac{1}{x - 3}$ is**

A x = 3

B x = -3

C x = 0

D x = 1

Understand It with Pulse | Flag a mistake

18 **Apply the concept . For x not = 3 , (x^2 - 9) / (x - 3) simplifies to**

A x - 3

B x + 3

C x + 9

D x^2 + 3

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19 Solve $\sqrt{x + 1} = 5$ for x. The value of x is

ANSWER _____

Understand It with Pulse | Flag a mistake

20 Solve $\frac{1}{x} = \frac{1}{10}$ for x. The value of x is

ANSWER _____

Understand It with Pulse | Flag a mistake

21 **Think about the principle . The graph of y = 1 / (x - 2) has a vertical asymptote at**



A x equals 2

B x equals 0

C y equals 2

D y equals 0

Understand It with Pulse | Flag a mistake

22 **Recall the principle . The graph of y = (2x + 1) / (x - 3) has a horizontal asymptote at**



A y equals 1

B y equals 2

C y equals 3

D y equals 0

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23 The coefficient in simplest form of $3\sqrt{3} + 5\sqrt{3}$ is

ANSWER _____

Understand It with Pulse | Flag a mistake

24 The value of the square root of 4 times the square root of 9 is

ANSWER _____

Understand It with Pulse | Flag a mistake

25 Review the principle. The value of $\frac{x + 2}{x - 1}$ when $x = 4$ is

ANSWER _____

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ANSWER KEY

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

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