NEW BRUNSWICK PRE-CALCULUS 110 · UNIT D · 25 QUESTIONS

Polynomial Factoring and Systems of Equations — 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 factors x minus 2 and x minus 3 has its larger root equal to**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **The quadratic with factors x minus -1 and x minus 5 has its larger root equal to**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **The quadratic with factors x minus 4 and x minus 6 has its larger root equal to**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **The quadratic with factors x minus -2 and x minus 7 has its larger root equal to**

ANSWER

Understand It with Pulse | Flag a mistake

5 **The greatest common factor of 2x and 4 is**

ANSWER

Understand It with Pulse | Flag a mistake

6 **The greatest common factor of 3x and 9 is**

ANSWER

Understand It with Pulse | Flag a mistake

7 **The greatest common factor of 5x and 10 is**

ANSWER

Understand It with Pulse | Flag a mistake

8 **The greatest common factor of 4x and 12 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **The difference of squares $x^2 - 9$ factors as $x - ax + a$, where a =**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **The difference of squares $x^2 - 16$ factors as $x - ax + a$, where a =**

ANSWER _____

Understand It with Pulse | Flag a mistake

11 **The difference of squares $x^2 - 25$ factors as $x - ax + a$, where a =**

ANSWER _____

Understand It with Pulse | Flag a mistake

12 **The system x + y = 5 and x - y = 1 has solution x =**

ANSWER _____

Understand It with Pulse | Flag a mistake

13 **The system x + y = 6 and x - y = 4 has solution x =**

ANSWER _____

Understand It with Pulse | Flag a mistake

14 **The system x + y = 7 and x - y = 1 has solution x =**

ANSWER _____

Understand It with Pulse | Flag a mistake

15 **Factoring $x^2 + 5x + 6$ gives**

- A $x + 2 \times x + 3$
- B $x + 1 \times x + 6$
- C $x - 2 \times x - 3$
- D $x + 5 \times x + 1$

Understand It with Pulse | Flag a mistake

16 **The degree of the polynomial $3x^3 + 2x + 1$ is**

- A 2
- B 3
- C 1
- D 6

Understand It with Pulse | Flag a mistake

17 **A polynomial with degree 2 is called**

A linear

B cubic

C quadratic

D quartic

Understand It with Pulse | Flag a mistake

18 **The remainder when a polynomial is divided by x minus a is found by evaluating at**

A negative a

B 0

C 1

D a

Understand It with Pulse | Flag a mistake

19 **Two equations whose graphs are parallel lines have**

- A no common solution
- B one common solution
- C infinitely many solutions
- D two common solutions

Understand It with Pulse | Flag a mistake

20 **The product of x + 2 and x + 3 evaluated at x = 1 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

21 **The system x + y = 9 and x - y = 3 has solution y =**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **The quadratic with factors x minus 3 and x minus 9 has its larger root equal to**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **The quadratic with factors x minus -5 and x minus 2 has its larger root equal to**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **The greatest common factor of 12x and 18 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **The system x + y = 15 and x - y = 5 has solution y =**

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.