FINAL EXAM - PRACTICE TEST | NEW BRUNSWICK PRE-CALCULUS 110 · FINAL EXAM · 50 QUESTIONS

Final Exam — 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 equation absolute value of x minus 2 equals 5 has a smaller solution equal to**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **The product of square root of 2 and square root of 8 is the square root of 16, which equals**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **The cosine of 0 degrees is**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **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

5 **The quadratic with roots 3 and 7 has its vertex x coordinate equal to**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **Absolute value is never**

A zero

B positive

C an integer

D negative

Understand It with Pulse | Flag a mistake

7 The fraction $\frac{10}{2}$ simplifies to

ANSWER

Understand It with Pulse | Flag a mistake

8 Tangent is positive in quadrants

A 1 and 2

B 1 and 4

C 1 and 3

D 2 and 4

Understand It with Pulse | Flag a mistake

9 The greatest common factor of 5x and 10 is

ANSWER

Understand It with Pulse | Flag a mistake

10 **The discriminant of $x^2 + 2x - 8$ is**

ANSWER _____

Understand It with Pulse | Flag a mistake

11 **The absolute value of -3 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

12 **The square root of 16 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

13 **The cosine of 120 degrees, rounded to one decimal place, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

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

ANSWER _____

Understand It with Pulse | Flag a mistake

15 **The value of $x^2 - 5x + 6$ when $x = 5$ is**

ANSWER _____

Understand It with Pulse | Flag a mistake

16 **The equation absolute value of x minus 0 equals 7 has a larger solution equal to**

ANSWER _____

Understand It with Pulse | Flag a mistake

17 **The square root of 25 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

18 **The cosine of 240 degrees, rounded to one decimal place, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

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

A x plus 2 times x plus 3

B x plus 1 times x plus 6

C x minus 2 times x minus 3

D x plus 5 times x plus 1

Understand It with Pulse | Flag a mistake

20 The quadratic formula solves equations of the form

- **A** $a x^2 + b x + c = 0$
- **B** $a x + b = 0$
- **C** $a x^3 = 0$
- **D** $\frac{a}{x} = 0$

Understand It with Pulse | Flag a mistake

21 The equation absolute value of x minus 6 equals 2 has a smaller solution equal to

ANSWER _____

Understand It with Pulse | Flag a mistake

22 The square root of 36 is

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **The cosine of 300 degrees, rounded to one decimal place, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **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

25 **The smaller root of $x^2 - 7x + 12 = 0$ is**

ANSWER _____

Understand It with Pulse | Flag a mistake

26 **The equation absolute value of x minus 4 equals 2 has a larger solution equal to**

ANSWER _____

Understand It with Pulse | Flag a mistake

27 **The fraction $\frac{14}{2}$ simplifies to**

ANSWER _____

Understand It with Pulse | Flag a mistake

28 **The reference angle for 300 degrees is, in degrees**

ANSWER _____

Understand It with Pulse | Flag a mistake

29 **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

30 **The discriminant of $x^2 - 4x - 12$ is**

ANSWER

Understand It with Pulse | Flag a mistake

31 **Absolute value of -6 is**

A -6

B 6

C 0

D 36

Understand It with Pulse | Flag a mistake

32 **A rational expression is undefined where its denominator is**

- A one
- B zero
- C negative
- D positive

Understand It with Pulse | Flag a mistake

33 **The sine of 90 degrees is**

- A 1
- B 0
- C -1
- D 0.5

Understand It with Pulse | Flag a mistake

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

ANSWER

Understand It with Pulse | Flag a mistake

35 **The quadratic with roots -3 and 3 has its vertex x coordinate equal to**

ANSWER

Understand It with Pulse | Flag a mistake

36 **The absolute value of 6 is**

ANSWER

Understand It with Pulse | Flag a mistake

37 **The square root of 121 is**

ANSWER

Understand It with Pulse | Flag a mistake

38 **The reference angle for 135 degrees is, in degrees**

ANSWER _____

Understand It with Pulse | Flag a mistake

39 **The difference of squares $x^2 - 49$ factors as $x - ax + a$, where a =**

ANSWER _____

Understand It with Pulse | Flag a mistake

40 **The value of $x^2 - 5x + 6$ when $x = 6$ is**

ANSWER _____

Understand It with Pulse | Flag a mistake

41 **The value of absolute value of -9 minus absolute value of 2 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

42 Rationalizing the denominator of $\frac{1}{\sqrt{2}}$ gives

- **A** $\frac{2}{\sqrt{2}}$
- **B** $\frac{1}{2}$
- **C** square root of 2
- **D** $\frac{\sqrt{2}}{2}$

Understand It with Pulse | Flag a mistake

43 The sine of 180 degrees is

ANSWER _____

Understand It with Pulse | Flag a mistake

44 **The degree of $5x^4 + x$ is**

- A 5
- B 1
- C 4
- D 9

Understand It with Pulse | Flag a mistake

45 **A quadratic equation with two distinct real roots crosses the x axis**

- A once
- B twice
- C never
- D three times

Understand It with Pulse | Flag a mistake

46 **The value of absolute value of 5 minus 11 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

47 **The equation square root of x = 8 has solution x =**

ANSWER _____

Understand It with Pulse | Flag a mistake

48 **The reference angle for 315 degrees is, in degrees**

ANSWER _____

Understand It with Pulse | Flag a mistake

49 **The quadratic with factors x minus 7 and x minus 10 has its larger root equal to**

ANSWER _____

Understand It with Pulse | Flag a mistake

50 **The discriminant of $x^2 + 10x + 25$ is**

ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	-3	**18.**	-0.5	**35.**	0
2.	4	**19.**	A	**36.**	6
3.	1	**20.**	A	**37.**	11
4.	6	**21.**	4	**38.**	45
5.	5	**22.**	6	**39.**	7
6.	D	**23.**	0.5	**40.**	12
7.	5	**24.**	A	**41.**	7
8.	C	**25.**	3	**42.**	D
9.	5	**26.**	6	**43.**	0
10.	36	**27.**	7	**44.**	C
11.	3	**28.**	60	**45.**	B
12.	4	**29.**	2	**46.**	6
13.	-0.5	**30.**	64	**47.**	64
14.	5	**31.**	B	**48.**	45
15.	6	**32.**	B	**49.**	10
16.	7	**33.**	A	**50.**	0
17.	5	**34.**	4		

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