PRINCE EDWARD ISLAND PRE-CALCULUS 11 · 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 **An arithmetic sequence starts with 3 and has common difference 4. What is term number 5 of the sequence**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **In a right triangle, the side opposite an angle is 7 units and the hypotenuse is 25 units. What is the sine of the angle, to two decimal places**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **For the quadratic y = (x - 1)(x - 2) what is the larger root**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **Simplifying the square root of 36 gives**

- A 6
- B 18
- C 12
- D 9

Understand It with Pulse | Flag a mistake

5 **Solve the system x + y = 10 x - y = 2 What is the value of x**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **A series is the**

A list of terms only

B sum of the terms of a sequence

C difference of terms

D product of terms

Understand It with Pulse | Flag a mistake

7 **An angle of 180 degrees in radians is**

A π/2

B 2π

C π/4

D π

Understand It with Pulse | Flag a mistake

8 **A quadratic that opens upward and has vertex above the x axis has**

- A no real roots
- B two real roots
- C one real root
- D a maximum

Understand It with Pulse | Flag a mistake

9 **For the radical function $y = \sqrt{x - 2}$, what is the smallest x value in its domain**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **A system of two linear equations has no solution when the lines are**

- A the same line
- B parallel and distinct
- C perpendicular
- D intersecting

Understand It with Pulse | Flag a mistake

11 **A geometric sequence has a constant**

- A difference between terms
- B ratio between terms
- C sum of terms
- D square of terms

Understand It with Pulse | Flag a mistake

12 **The amplitude of y = 3 sin x is**

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

Understand It with Pulse | Flag a mistake

13 **If the discriminant is negative, the quadratic has**

- A no real roots
- B two real roots
- C one real root
- D three roots

Understand It with Pulse | Flag a mistake

14 **The cube root of 27 is**

A 3

B 9

C 6

D 81

Understand It with Pulse | Flag a mistake

15 **Graphing y = |x| shifted 3 units up gives**

A $y = |x| + 3$

B $y = |x| - 3$

C $y = |x + 3|$

D $y = |x - 3|$

Understand It with Pulse | Flag a mistake

16 **The difference between consecutive terms of 30, 26, 22, 18 is**

A 4

B -8

C 8

D -4

Understand It with Pulse | Flag a mistake

17 **Cosine of 60 degrees equals**

A $\frac{1}{2}$

B $\sqrt{3}/2$

C 1

D 0

Understand It with Pulse | Flag a mistake

18 **The leading coefficient of $y = -3x^2 + x$ is**

A 3

B 1

C 0

D -3

Understand It with Pulse | Flag a mistake

19 **The domain of $y = 1 / (x + 4)$ excludes**

A $x = 4$

B $x = 0$

C $x = -4$

D $x = 1$

Understand It with Pulse | Flag a mistake

20 **The absolute value of -7 is**

- **A** 7
- **B** -7
- **C** 0
- **D** -14

Understand It with Pulse | Flag a mistake

21 **A geometric series starts with 2, has common ratio 2, and has 5 terms. What is the sum of the series**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **Sine of 45 degrees equals**

- **A** $\frac{1}{2}$
- **B** 1
- **C** $\sqrt{2}$
- **D** $\sqrt{2}/2$

Understand It with Pulse | Flag a mistake

23 **For the quadratic y = (x - 2)(x - 1) what is the larger root**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **The radical symbol for a cube root has index**

A 2

B 4

C 1

D 3

Understand It with Pulse | Flag a mistake

25 **Solve the equation |x - 2| = 7 What is the smaller solution**

ANSWER _____

Understand It with Pulse | Flag a mistake

26 **A geometric series starts with 3, has common ratio 2, and has 4 terms. What is the sum of the series**

ANSWER _____

Understand It with Pulse | Flag a mistake

27 **In a right triangle, the side opposite an angle is 16 units and the hypotenuse is 20 units. What is the sine of the angle, to two decimal places**

ANSWER _____

Understand It with Pulse | Flag a mistake

28 **For the quadratic $y = 2x^2 + 4x + 2$ what is the discriminant**

ANSWER _____

Understand It with Pulse | Flag a mistake

29 **Simplifying the square root of 12 gives**

A $3\sqrt{2}$

B $2\sqrt{3}$

C 6

D $4\sqrt{3}$

Understand It with Pulse | Flag a mistake

30 **Solve the equation |x - 4| = 6 What is the smaller solution**

ANSWER _____

Understand It with Pulse | Flag a mistake

31 **A geometric series starts with 1, has common ratio 3, and has 4 terms. What is the sum of the series**

ANSWER _____

Understand It with Pulse | Flag a mistake

32 **In a right triangle, the side adjacent to an angle is 24 units and the hypotenuse is 26 units. What is the cosine of the angle, to two decimal places**

ANSWER _____

Understand It with Pulse | Flag a mistake

33 **For the quadratic $y = 1x^2 + 2x + 1$ what is the discriminant**

ANSWER _____

Understand It with Pulse | Flag a mistake

34 **The square root of 50 can be written as a number times the square root of 2. What is that number**

ANSWER _____

Understand It with Pulse | Flag a mistake

35 **Solve the equation |x - 1| = 9 What is the smaller solution**

ANSWER _____

Understand It with Pulse | Flag a mistake

36 **The sequence 2, 5, 8, 11 is**

A geometric

B neither

C arithmetic

D quadratic

Understand It with Pulse | Flag a mistake

37 **Two angles of a triangle measure 60 degrees and 60 degrees. What is the third angle in degrees**

ANSWER _____

Understand It with Pulse | Flag a mistake

38 **For the quadratic y = (x - 2)(x - 6) what is the x coordinate of the vertex**

ANSWER _____

Understand It with Pulse | Flag a mistake

39 **The square root of 98 can be written as a number times the square root of 2. What is that number**

ANSWER _____

Understand It with Pulse | Flag a mistake

40 **Solve the system x + y = 14 x - y = 6 What is the value of y**

ANSWER _____

Understand It with Pulse | Flag a mistake

41 **A recursive formula for a sequence gives each term in terms of**

A future terms

B the sum only

C previous terms

D the ratio only

Understand It with Pulse | Flag a mistake

42 **The reference angle for 210 degrees is**

A 30 degrees

B 210 degrees

C 60 degrees

D 150 degrees

Understand It with Pulse | Flag a mistake

43 **The quadratic formula solves equations of the form**

- **A** $ax^2 + bx + c = 0$
- **B** $mx + b = 0$
- **C** $x^2 = 0$ only
- **D** $a^x = b$

Understand It with Pulse | Flag a mistake

44 **The square root of x^2 , for x greater than or = 0 , is**

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

Understand It with Pulse | Flag a mistake

45 **The inequality |x| less than 3 means x is between**

A 3 and infinity

B negative infinity and 3

C -3 and 3

D 0 and 3

Understand It with Pulse | Flag a mistake

46 **The next term of 2, 6, 18, 54 is**

A 108

B 162

C 72

D 216

Understand It with Pulse | Flag a mistake

47 **In a right triangle, the side opposite an angle is 33 units and the side adjacent to the angle is 44 units. What is the tangent of the angle, to two decimal places**

ANSWER _____

Understand It with Pulse | Flag a mistake

48 **Writing $y = x^2 + 6x + 5$ in vertex form gives vertex**

A (3, 4)

B (-3, 4)

C (3, -4)

D (-3, -4)

Understand It with Pulse | Flag a mistake

49 **The square root of 18 can be written as a number times the square root of 2. What is that number**

ANSWER _____

Understand It with Pulse | Flag a mistake

50 **Solve the system x + y = 11 x - y = 5 What is the value of y**

ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	19	**18.**	D	**35.**	-8
2.	0.28	**19.**	C	**36.**	C
3.	2	**20.**	A	**37.**	60
4.	A	**21.**	62	**38.**	4
5.	6	**22.**	D	**39.**	7
6.	B	**23.**	2	**40.**	4
7.	D	**24.**	D	**41.**	C
8.	A	**25.**	-5	**42.**	A
9.	2	**26.**	45	**43.**	A
10.	B	**27.**	0.8	**44.**	C
11.	B	**28.**	0	**45.**	C
12.	C	**29.**	B	**46.**	B
13.	A	**30.**	-2	**47.**	0.75
14.	A	**31.**	40	**48.**	D
15.	A	**32.**	0.92	**49.**	3
16.	D	**33.**	0	**50.**	3
17.	A	**34.**	5		

© 2026 Brett Robbins. All Rights Reserved.