FINAL EXAM - PRACTICE TEST | NEW BRUNSWICK FOUNDATIONS OF MATHEMATICS 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 next term in the pattern 5, 9, 13, 17, 21 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **A triangle has sides 5 and 5 enclosing a 60 degree angle. The third side² is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **The solution of the system x + y = 5 and x - y = 1 has y =**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **A parabola has vertex x coordinate 2. Its axis of symmetry is x equals**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **A house costs 200000 dollars. A down payment of 10 percent is, in dollars**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **A statement and its contrapositive always have the**

A same truth value

B opposite truth value

C same numbers

D opposite numbers

Understand It with Pulse | Flag a mistake

7 **An obtuse triangle has one angle**

A equal to 90 degrees

B less than 90 degrees only

C greater than 90 degrees

D equal to 180 degrees

Understand It with Pulse | Flag a mistake

8 **The boundary line of y is less than x plus 1 is drawn as a**

A solid line

B curve

C dashed line

D point

Understand It with Pulse | Flag a mistake

9 **Factoring $x^2 - 9$ gives**

- A $(x - 3)(x + 3)$
- B $(x - 9)(x + 9)$
- C $x^2 - 3$
- D $(x - 3)^2$

Understand It with Pulse | Flag a mistake

10 **An investment portfolio spreads risk by holding**

- A one stock only
- B cash only
- C different types of investments
- D one bond only

Understand It with Pulse | Flag a mistake

11 **The greatest common factor of 20 and 30 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

12 **The cosine law is used when two sides and the**

A opposite angle only is known

B area only is known

C perimeter only is known

D included angle are known

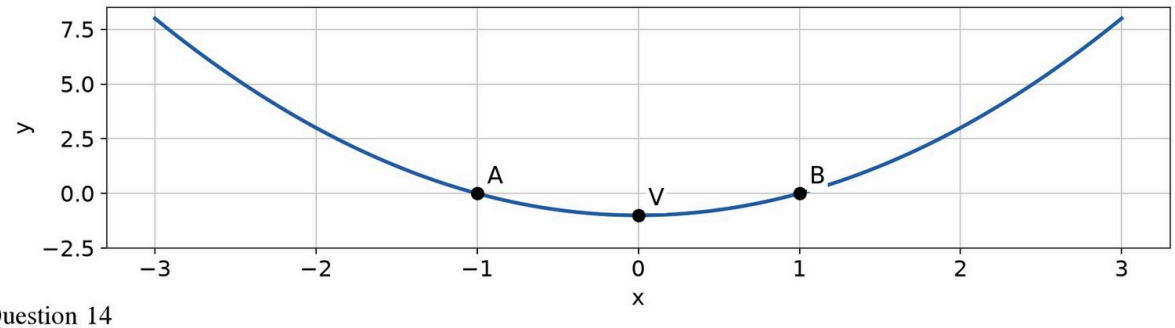
Understand It with Pulse | Flag a mistake

13 **The largest integer satisfying 3x plus 2 is less than 14 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

14 The graph shows y = x² - 1 . The y intercept of the parabola is



Question 14

The graph shows $y = x^2 - 1$. The y intercept of the parabola is

A) 0

B) negative 1

C) 1

D) 2

A 0

B -1

C 1

D 2

Understand It with Pulse

Flag a mistake

15 **Rent paid over a year with no equity built is a cost of**

A buying

B renting

C saving

D investing

Understand It with Pulse | Flag a mistake

16 **The greatest common factor of 15 and 25 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

17 **The sine law relates sides of a triangle to the**

A cosines of adjacent angles

B tangents of all angles

C sines of opposite angles

D areas of squares

Understand It with Pulse | Flag a mistake

18 **The solution of the system x + y = 7 and x - y = 1 has y =**

ANSWER _____

Understand It with Pulse | Flag a mistake

19 **A parabola has vertex x coordinate -1. Its axis of symmetry is x equals**

ANSWER _____

Understand It with Pulse | Flag a mistake

20 **A portfolio holds 50 percent in stocks and the rest in bonds. The percent in bonds is**

ANSWER _____

Understand It with Pulse | Flag a mistake

21 **The least common multiple of 4 and 10 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **A triangle has sides 5, 12, and 13. Its largest angle, in degrees, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **The largest integer satisfying 3x plus 5 is less than 20 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **The quadratic with roots -2 and -3 has its larger root equal to**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **A house costs 250000 dollars. A down payment of 5 percent is, in dollars**

ANSWER _____

Understand It with Pulse | Flag a mistake

26 **The next term in the pattern 6, 11, 16, 21, 26 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

27 **A triangle has sides 7 and 7 enclosing a 60 degree angle. The third side² is**

ANSWER _____

Understand It with Pulse | Flag a mistake

28 **The largest integer satisfying 5x plus 2 is less than 27 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

29 **The quadratic with roots 3 and 6 has its larger root equal to**

ANSWER _____

Understand It with Pulse | Flag a mistake

30 **Simple interest on 4000 dollars at 5 percent per year for 3 years is, in dollars**

ANSWER _____

Understand It with Pulse | Flag a mistake

31 **The least common multiple of 9 and 12 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

32 **A triangle has sides 10 and 10 enclosing a 60 degree angle. The third side² is**

ANSWER _____

Understand It with Pulse | Flag a mistake

33 **The solution of the system x + y = 10 and x - y = -8 has y =**

ANSWER _____

Understand It with Pulse | Flag a mistake

34 **The value of $y = x^2 + 4x + 3$ when x = 2 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

35 **Simple interest on 2000 dollars at 10 percent per year for 3 years is, in dollars**

ANSWER _____

Understand It with Pulse | Flag a mistake

36 **The greatest common factor of 9 and 15 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

37 **A triangle has angles 20 degrees and 110 degrees. The third angle, in degrees, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

38 **The solution of the system x + y = 9 and x - y = 1 has x =**

ANSWER _____

Understand It with Pulse | Flag a mistake

39 **The quadratic with roots -3 and 1 has its larger root equal to**

ANSWER _____

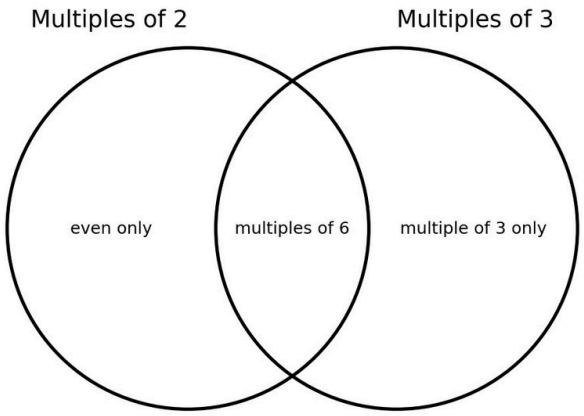
Understand It with Pulse | Flag a mistake

40 **A house costs 100000 dollars. A down payment of 30 percent is, in dollars**

ANSWER

Understand It with Pulse | Flag a mistake

41 **The Venn diagram shows multiples of 2 and multiples of 3. The number 12 belongs in the**



Question 41

The Venn diagram shows multiples of 2 and multiples of 3. The number 12 belongs in the

A) multiples of 2 only region

B) multiples of 3 only region

C) outside both circles

D) overlap of both circles

A multiples of 2 only region

B multiples of 3 only region

C outside both circles

D overlap of both circles

Understand It with Pulse | Flag a mistake

42 **A triangle has angles 40 degrees and 70 degrees. The third angle, in degrees, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

43 **Two lines with different slopes intersect at**

A no points

B exactly one point

C infinitely many points

D two points

Understand It with Pulse | Flag a mistake

44 **The y intercept of $y = x^2 + 2x + 5$ is**

- A 2
- B 5
- C 1
- D 0

Understand It with Pulse | Flag a mistake

45 **The principal of a loan is the**

- A amount borrowed
- B interest charged
- C monthly payment
- D total repaid

Understand It with Pulse | Flag a mistake

46 **The greatest common factor of 30 and 45 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

47 **A triangle has sides 12 and 12 enclosing a 60 degree angle. The third side² is**

ANSWER _____

Understand It with Pulse | Flag a mistake

48 **The solution of the system x + y = 15 and x - y = -3 has x =**

ANSWER _____

Understand It with Pulse | Flag a mistake

49 **The quadratic with roots 6 and 10 has its larger root equal to**

ANSWER _____

Understand It with Pulse | Flag a mistake

50 **A house costs 180000 dollars. A down payment of 10 percent is, in dollars**

ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	25	**18.**	3	**35.**	600
2.	25	**19.**	-1	**36.**	3
3.	2	**20.**	50	**37.**	50
4.	2	**21.**	20	**38.**	5
5.	20000	**22.**	90	**39.**	1
6.	A	**23.**	4	**40.**	30000
7.	C	**24.**	-2	**41.**	D
8.	C	**25.**	12500	**42.**	70
9.	A	**26.**	31	**43.**	B
10.	C	**27.**	49	**44.**	B
11.	10	**28.**	4	**45.**	A
12.	D	**29.**	6	**46.**	15
13.	3	**30.**	600	**47.**	144
14.	B	**31.**	36	**48.**	6
15.	B	**32.**	100	**49.**	10
16.	5	**33.**	9	**50.**	18000
17.	C	**34.**	15		

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