MANITOBA ESSENTIAL MATHEMATICS 20S · 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 **A team earns 3 points for a win and 1 point for a draw. With 6 wins and 3 draws, its points total is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **An item has a down payment of 500 dollars and 7 monthly payments of 200 dollars. Its total cost, in dollars, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **A rectangular prism has length 6, width 5, and height 5. Its volume is**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **The right triangle shown has its legs labelled. Its hypotenuse is**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **The median of 7, 9, 12, 14, and 16 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **The pattern 8, 16, 24, 32 continues. The next term is**

A 36

B 40

C 42

D 48

Understand It with Pulse | Flag a mistake

7 **A puzzle asks for the sum of 4 and the product of 4 and 5. That total is**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **An item costs 80 dollars and is discounted by 15 percent. Its sale price, in dollars, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **A triangle has base 6 and height 7. Its area is**

ANSWER _____

Understand It with Pulse | Flag a mistake

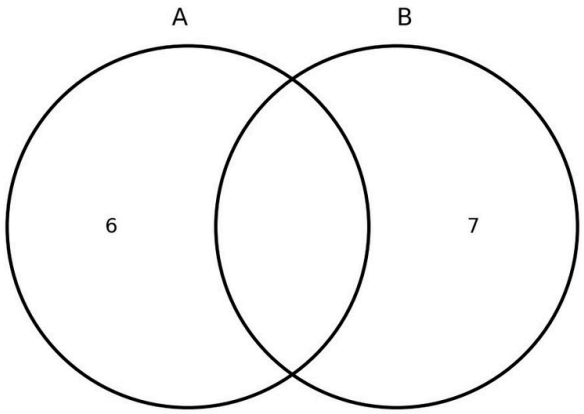
10 **A right triangle has hypotenuse 25 and one leg 7. The other leg is**

ANSWER _____

Understand It with Pulse | Flag a mistake

11

The Venn diagram shows 6 in A only and 7 in B only. There are 19 in total. The number in both sets is



Question 11

The Venn diagram shows 6 in A only and 7 in B only. There are 19 in total. The number in both sets is

ANSWER

Understand It with Pulse | Flag a mistake

12

One table seats 4 people and each extra table adds 2 seats. 7 tables seat

Question 12

One table seats 4 people and each extra table adds 2 seats. 7 tables seat

ANSWER

Understand It with Pulse | Flag a mistake

13 **The number of ordered pairs that can be formed from 5 different items is**

ANSWER _____

Understand It with Pulse | Flag a mistake

14 **Simple interest on 2000 dollars at 5 percent per year for 2 years is, in dollars**

ANSWER _____

Understand It with Pulse | Flag a mistake

15 **A rectangle has length 7 and width 8. Its area is**

ANSWER _____

Understand It with Pulse | Flag a mistake

16 **A right triangle has legs 6 and 8. Its hypotenuse is**

ANSWER _____

Understand It with Pulse | Flag a mistake

17 **A bag has 2 red balls out of 10 balls in total. The probability of drawing red, as a percent, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

18 **A sequence increases by 9 each time, starting at 5. The third term is**

A 14

B 21

C 23

D 27

Understand It with Pulse | Flag a mistake

19 **The value that makes an equation true is called the**

A solution

B coefficient

C variable

D expression

Understand It with Pulse | Flag a mistake

20 **A straight line graph has a slope that is**

Question 20

A straight line graph has a slope that is

A) increasing

B) constant

C) zero always

D) undefined always

A increasing

B constant

C zero always

D undefined always

Understand It with Pulse | Flag a mistake

21 **The distance around a circle is the**

- A circumference
- B diameter
- C radius
- D area

Understand It with Pulse | Flag a mistake

22 **The line that divides a parabola into two equal halves is the**

- A directrix
- B axis of symmetry
- C asymptote
- D tangent

Understand It with Pulse | Flag a mistake

23 **A triangle with no sides equal is**

- A isosceles
- B equilateral
- C scalene
- D right

Understand It with Pulse | Flag a mistake

24 **A pattern adds 6 each time, starting at 4. The term after 22 is**

- A 26
- B 30
- C 24
- D 28

Understand It with Pulse | Flag a mistake

25 **The slope of a horizontal line is**

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

Understand It with Pulse | Flag a mistake

26 **The point where a graph crosses the y axis is the**

Question 26

The point where a graph crosses the y axis is the

A) x intercept

B) vertex

C) y intercept

D) origin

- A x intercept
- B vertex
- C y intercept
- D origin

Understand It with Pulse | Flag a mistake

27 **A triangle with two sides equal is**

A equilateral

B isosceles

C scalene

D obtuse

Understand It with Pulse | Flag a mistake

28 **In a right triangle, the side opposite the right angle is the**

A adjacent

B opposite side

C hypotenuse

D base

Understand It with Pulse | Flag a mistake

29 **A polygon with five sides is a**

A hexagon

B octagon

C heptagon

D pentagon

Understand It with Pulse | Flag a mistake

30 **A pattern of tiles has 4 tiles in figure 1 and 2 more tiles in each later figure. Figure 4 has**

Question 30

A pattern of tiles has 4 tiles in figure 1 and 2 more tiles in each later figure. Figure 4 has

ANSWER

Understand It with Pulse | Flag a mistake

31 The point where a graph crosses the x axis is the

Question 31

The point where a graph crosses the x axis is the

A) y intercept

B) x intercept

C) vertex

D) origin

- A y intercept
- B x intercept
- C vertex
- D origin

Understand It with Pulse | Flag a mistake

32 A triangle with all sides equal is

- A isosceles
- B scalene
- C equilateral
- D right

Understand It with Pulse | Flag a mistake

33 **A rectangle has length 3 and width 2. Its area is**

ANSWER _____

Understand It with Pulse | Flag a mistake

34 **A ladder reaches a wall forming a right triangle with base 28 and height 96. The ladder length is**

ANSWER _____

Understand It with Pulse | Flag a mistake

35 **The mean of 3, 5, 7, and 9 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

36 **One table seats 6 people and each extra table adds 2 seats. 5 tables seat**

Question 36

One table seats 6 people and each extra table adds 2 seats. 5 tables seat

ANSWER _____

Understand It with Pulse | Flag a mistake

37 **A puzzle asks for the sum of 4 and the product of 4 and 2. That total is**

ANSWER _____

Understand It with Pulse | Flag a mistake

38 **An item costs 220 dollars and is discounted by 20 percent. Its sale price, in dollars, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

39 **On a map, 1 unit represents 45 units in real life. A map distance of 9 represents a real distance of**

ANSWER _____

Understand It with Pulse | Flag a mistake

40 **The value of sin 0 degrees is**

ANSWER _____

Understand It with Pulse | Flag a mistake

41 **A data set ranges from 9 to 18. Its range is**

ANSWER _____

Understand It with Pulse | Flag a mistake

42 **The 9th term of a pattern starting at 6 and adding 5 each time is**

ANSWER _____

Understand It with Pulse | Flag a mistake

43 **The number of ordered pairs that can be formed from 6 different items is**

ANSWER _____

Understand It with Pulse | Flag a mistake

44 **Simple interest on 300 dollars at 7 percent per year for 3 years is, in dollars**

ANSWER _____

Understand It with Pulse | Flag a mistake

45 **Half of the diameter of a circle is the**

A circumference

B radius

C chord

D arc

Understand It with Pulse | Flag a mistake

46 **An angle measuring less than 90 degrees is an**

A obtuse angle

B right angle

C acute angle

D reflex angle

Understand It with Pulse | Flag a mistake

47 **The middle value of an ordered data set is the**

A mean

B mode

C range

D median

Understand It with Pulse | Flag a mistake

48 **A bus fare pattern starts at 2 dollars and rises by 15 dollars for each zone. The fare for zone 5 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

49 **The sum of the interior angles of a triangle is**

A 90 degrees

B 270 degrees

C 360 degrees

D 180 degrees

Understand It with Pulse | Flag a mistake

50 **A polygon with six sides is a**

A hexagon

B pentagon

C octagon

D decagon

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	21	**18.**	C	**35.**	6
2.	1900	**19.**	A	**36.**	14
3.	150	**20.**	B	**37.**	12
4.	17	**21.**	A	**38.**	176
5.	12	**22.**	B	**39.**	405
6.	B	**23.**	C	**40.**	0
7.	24	**24.**	D	**41.**	9
8.	68	**25.**	A	**42.**	46
9.	21	**26.**	C	**43.**	30
10.	24	**27.**	B	**44.**	63
11.	6	**28.**	C	**45.**	B
12.	16	**29.**	D	**46.**	C
13.	20	**30.**	10	**47.**	D
14.	200	**31.**	B	**48.**	62
15.	56	**32.**	C	**49.**	D
16.	10	**33.**	6	**50.**	A
17.	20	**34.**	100		

© 2026 Brett Robbins. All Rights Reserved.