MANITOBA APPLIED MATHEMATICS 40S · 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 number of ways to arrange 3 different items in order is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **Simple interest on 200 dollars at 5 percent per year for 1 years is, in dollars**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **The number of ordered pairs that can be formed from 8 different items is**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **Let f(x) = 5x + 1 . The inverse function at 16 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **Use pi equals 3.14. A circle has radius 8. Its area, to two decimal places, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **The number of ways to choose 2 items from 8 items is**

ANSWER _____

Understand It with Pulse | Flag a mistake

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

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **A price rises by 30 percent from 80 dollars. The increase, in dollars, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **The number of possible outcomes when flipping a coin 6 times is**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **Let f(x) = 2x + 5 and g(x) = 3x + 4 . The value of f(g(4)) is**

ANSWER _____

Understand It with Pulse | Flag a mistake

11 **A rectangle has length 13 and width 8. Its perimeter is**

ANSWER _____

Understand It with Pulse | Flag a mistake

12 **In the data set 7, 10, 7, 12, 7, the mode is**

ANSWER _____

Understand It with Pulse | Flag a mistake

13 **The number of possible outcomes when flipping a coin 4 times is**

ANSWER _____

Understand It with Pulse | Flag a mistake

14 **An item has a down payment of 400 dollars and 11 monthly payments of 120 dollars. Its total cost, in dollars, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

15 **An arithmetic pattern starts at 4 and increases by 5. Term 8 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

16 **The vertex of the parabola $f(x) = 2x^2 - 16x + 3$ has x coordinate**

ANSWER _____

Understand It with Pulse | Flag a mistake

17 **The right triangle shown has its base and height labelled. Its area is**

ANSWER _____

Understand It with Pulse | Flag a mistake

18 **The median of 8, 10, 13, 15, and 17 is**

ANSWER _____

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 polygon with eight sides is an**

A hexagon

B pentagon

C decagon

D octagon

Understand It with Pulse | Flag a mistake

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

A zero

B undefined

C one

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 **The sum of the interior angles of a quadrilateral is**

A 360 degrees

B 180 degrees

C 270 degrees

D 540 degrees

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 team earns 3 points for a win and 1 point for a draw. With 6 wins and 1 draws, its points total is**

ANSWER _____

Understand It with Pulse | Flag a mistake

34 **Evaluate $f(x) = a\,x^2 + b\,x + c$ when $a = 3$, $b = 7$, $c = 7$, and $x = 5$. The result is**

ANSWER _____

Understand It with Pulse | Flag a mistake

35 **A rectangle has length 11 and width 5. Its perimeter is**

ANSWER _____

Understand It with Pulse | Flag a mistake

36 **The median of 9, 11, 14, 16, and 18 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

37 **The number of ordered pairs that can be formed from 7 different items is**

ANSWER _____

Understand It with Pulse | Flag a mistake

38 **A price rises by 40 percent from 100 dollars. The increase, in dollars, is**

ANSWER _____

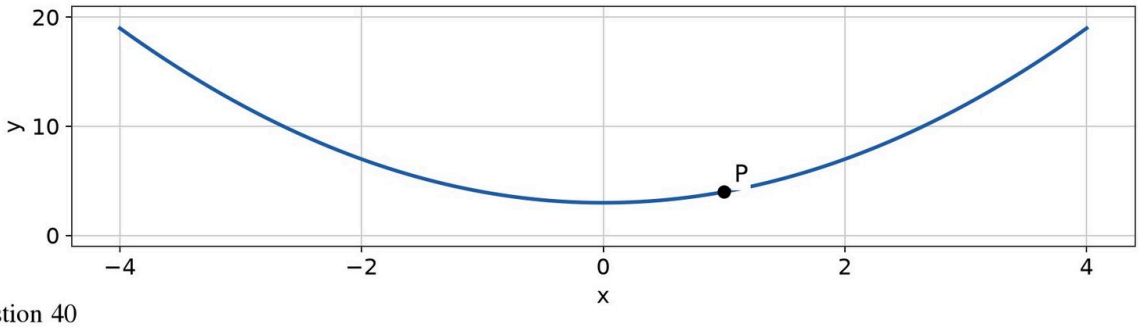
Understand It with Pulse | Flag a mistake

39 The number of ways to arrange 7 different items in order is

ANSWER

Understand It with Pulse | Flag a mistake

40 The graph shows y = 1x + 3 . The value of f(1) is



Question 40

The graph shows $y = 1x + 3$. The value of $f(1)$ is

ANSWER

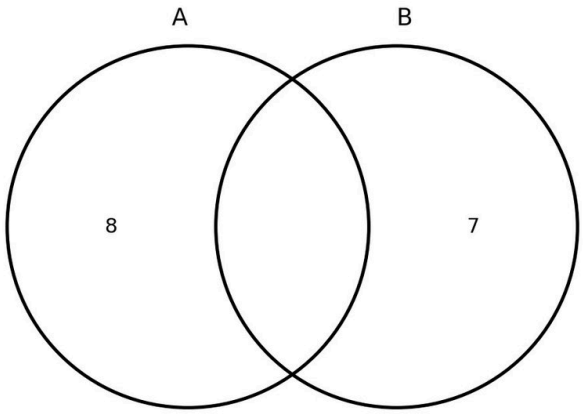
Understand It with Pulse | Flag a mistake

41 A rectangular prism has length 3, width 5, and height 4. Its volume is

ANSWER

Understand It with Pulse | Flag a mistake

42 **The Venn diagram shows 8 in A only and 7 in B only. There are 20 in total. The number in both sets is**



Question 42

The Venn diagram shows 8 in A only and 7 in B only. There are 20 in total. The number in both sets is

ANSWER

Understand It with Pulse | Flag a mistake

43 **The number of possible outcomes when flipping a coin 5 times is**

ANSWER

Understand It with Pulse | Flag a mistake

44 **An item has a down payment of 450 dollars and 11 monthly payments of 160 dollars. Its total cost, in dollars, is**

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 **In the expression 3x plus 5, the letter x is the**

A variable

B coefficient

C constant

D term

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.	6	**18.**	13	**35.**	32
2.	10	**19.**	A	**36.**	14
3.	56	**20.**	B	**37.**	42
4.	3	**21.**	A	**38.**	40
5.	200.96	**22.**	B	**39.**	5040
6.	28	**23.**	C	**40.**	4
7.	30	**24.**	D	**41.**	60
8.	24	**25.**	B	**42.**	5
9.	64	**26.**	C	**43.**	32
10.	37	**27.**	B	**44.**	2210
11.	42	**28.**	C	**45.**	B
12.	7	**29.**	D	**46.**	C
13.	16	**30.**	A	**47.**	D
14.	1720	**31.**	B	**48.**	A
15.	39	**32.**	C	**49.**	D
16.	4	**33.**	19	**50.**	A
17.	12	**34.**	117		

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