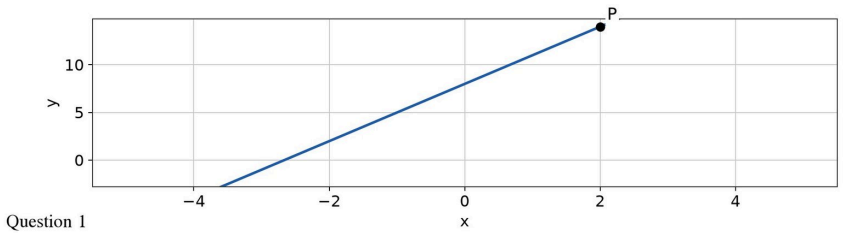
MANITOBA INTRODUCTION TO APPLIED AND PRE-CALCULUS MATHEMATICS 20S · UNIT D · 25 QUESTIONS

# Roots and Powers — 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 graph shows y = 3x + 8 . The value of f(2) is**




Question 1

The graph shows $y = 3x + 8$. The value of $f(2)$ is

ANSWER _____

Understand It with Pulse | Flag a mistake

**2** **Solve for x. The value of x is 4x + 6 = 14**

ANSWER _____

Understand It with Pulse | Flag a mistake

**3** **Evaluate a x + b when a = 3 , b = 13 , and x = 9 . The result is**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **Two numbers add to 18 and subtract to 2. The larger number is**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **Expand the product of x plus 5 and x plus 7. The coefficient of x is**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **An arithmetic sequence starts at 5 and increases by 2 each term. Term 9 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

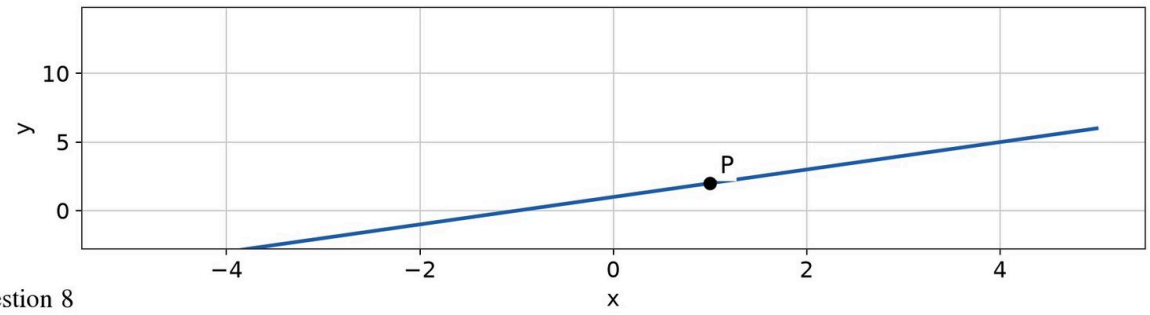
7 **A line passes through (2, 5) and (6, 17). Its slope is**

ANSWER _____

Understand It with Pulse | Flag a mistake

8

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




Question 8

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

ANSWER

Understand It with Pulse | Flag a mistake

9

## Solve for x. The value of x is 5x + 16 = 46

ANSWER

Understand It with Pulse | Flag a mistake

10

## Evaluate a x + b when a = 3 , b = 1 , and x = 8 . The result is

ANSWER

Understand It with Pulse | Flag a mistake

11 **Two numbers add to 22 and subtract to 12. The larger number is**

ANSWER _____

Understand It with Pulse | Flag a mistake

12 **Expand the product of x plus 6 and x plus 7. The coefficient of x is**

ANSWER _____

Understand It with Pulse | Flag a mistake

13 **An arithmetic sequence starts at 7 and increases by 5 each term. Term 10 is**

ANSWER _____

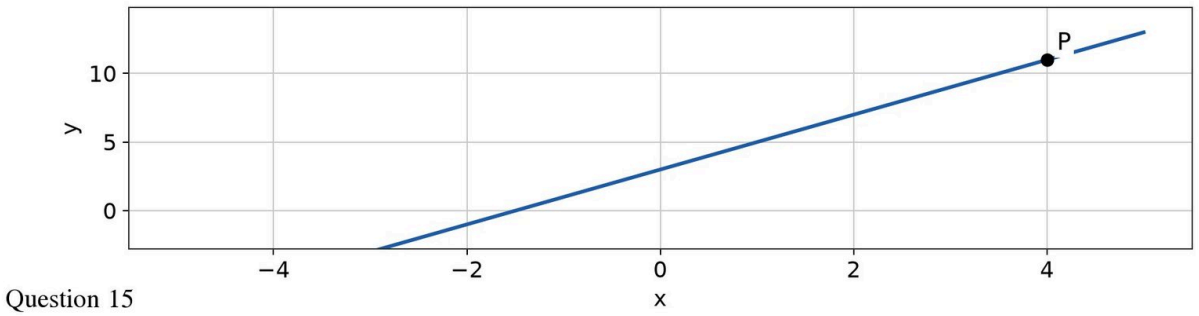
Understand It with Pulse | Flag a mistake

14 **A line passes through (3, 8) and (6, 23). Its slope is**

ANSWER _____

Understand It with Pulse | Flag a mistake

## 15 The graph shows y = 2x + 3 . The value of f(4) is




Question 15

The graph shows $y = 2x + 3$ . The value of $f(4)$ is

ANSWER

Understand It with Pulse | Flag a mistake

## 16 The point where a graph crosses the x axis is the

A y intercept

B vertex

C origin

D x intercept

Understand It with Pulse | Flag a mistake

17 **The highest or lowest point of a parabola is the**

A vertex

B intercept

C axis

D root

Understand It with Pulse | Flag a mistake

18 **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

19 **A triangle with all sides equal is**

A isosceles

B scalene

C equilateral

D right

Understand It with Pulse | Flag a mistake

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

A equilateral

B scalene

C obtuse

D isosceles

Understand It with Pulse | Flag a mistake

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

A scalene

B isosceles

C equilateral

D right

Understand It with Pulse | Flag a mistake

22 **The longest side of a right triangle is the**

A adjacent

B hypotenuse

C opposite

D leg

Understand It with Pulse | Flag a mistake

**23** **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

**24** **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

25 **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

# ANSWER KEY

| | | | | | |
|---|---|---|---|---|---|
| **1.** | 14 | **10.** | 25 | **19.** | C |
| **2.** | 2 | **11.** | 17 | **20.** | D |
| **3.** | 40 | **12.** | 13 | **21.** | A |
| **4.** | 10 | **13.** | 52 | **22.** | B |
| **5.** | 12 | **14.** | 5 | **23.** | C |
| **6.** | 21 | **15.** | 11 | **24.** | D |
| **7.** | 3 | **16.** | D | **25.** | A |
| **8.** | 2 | **17.** | A | | |
| **9.** | 6 | **18.** | B | | |

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