ARKANSAS PRECALCULUS · UNIT 3 · 10 QUESTIONS

Analytic Geometry and Conics — 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 For $\frac{x^2}{16} + \frac{y^2}{49} = 1$, the length of the minor axis is

- A 14
- B 8
- C 7
- D 4

Understand It with Pulse | Flag a mistake

2 **The midpoint of (0, 4) and (6, 10) is**

- A (6, 14)
- B (0, 4)
- C (3, 7)
- D (3, 3)

Understand It with Pulse | Flag a mistake

3 **The distance between (0, 0) and (6, 8) is**

- A 14
- B 2
- C 48
- D 10

Understand It with Pulse | Flag a mistake

4 **The distance between (2, 1) and (2, 9) is**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **The radius of $(x - 5)^2 + (y + 1)^2 = 64$ is**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **The focus of $x^2 = 8y$ is**

A (0, 2)

B (2, 0)

C (-2, 0)

D (0, -2)

Understand It with Pulse | Flag a mistake

7 **The directrix of $x^2 = 8y$ is**

- **A** $y = 2$
- **B** $y = -2$
- **C** $x = 2$
- **D** $x = -2$

Understand It with Pulse | Flag a mistake

8 **Which conic is formed by a plane cutting a cone parallel to its side**

- **A** Circle
- **B** Ellipse
- **C** Parabola
- **D** Hyperbola

Understand It with Pulse | Flag a mistake

9 The vertices of $\frac{x^2}{16} + \frac{y^2}{49} = 1$ on the major axis are

- **A** (0, ± 4)
- **B** (± 4, 0)
- **C** (± 7, 0)
- **D** (0, ± 7)

Understand It with Pulse | Flag a mistake

10 Completing the square, $x^2 + 6x$ needs the constant

- **A** 9
- **B** 6
- **C** 36
- **D** 3

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. B
2. C
3. D
4. 8
5. 8
6. A
7. B
8. C
9. D
10. A

© 2026 Brett Robbins. All Rights Reserved.