NEW MEXICO PRECALCULUS · NEW MEXICO

New Mexico Precalculus
Practice Test

Unit 3: Analytic Geometry and Conics

10 Questions

Original practice test based on the New Mexico curriculum. Work through each question, then check your answers at the end.

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.

© 2026 Brett Robbins. All Rights Reserved.

Question 1

For $\frac{x^2}{16} + \frac{y^2}{25} = 1$, the major vertices are

A) $(\pm 4, 0)$

B) $(0, \pm 4)$

C) $(0, \pm 5)$

D) $(\pm 5, 0)$

Understand It with Pulse | Flag a mistake

Question 2

For $\frac{x^2}{16} + \frac{y^2}{25} = 1$, the foci are

A) $(\pm 3, 0)$

B) $(0, \pm 3)$

C) $(0, \pm 4)$

D) $(\pm 4, 0)$

Understand It with Pulse | Flag a mistake

Question 3

The asymptotes of $\frac{y^2}{9} - \frac{x^2}{4} = 1$ are

A) $y = \pm \frac{2}{3}x$

B) $y = \pm \frac{3}{2}x$

C) $y = \pm \frac{9}{4}x$

D) $y = \pm \frac{4}{9}x$

Understand It with Pulse | Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

Question 4

The distance between $(0,\ 0)$ and $(6,\ 8)$ is

A) 10

B) 14

C) 48

D) 100

Understand It with Pulse | Flag a mistake

Question 5

The midpoint of $(-2,\ 5)$ and $(4,\ 1)$ is

A) $(1,\ 3)$

B) $(3,\ 1)$

C) $(1,\ 2)$

D) $(2,\ 3)$

Understand It with Pulse | Flag a mistake

Question 6

The equation $\frac{x^2}{9} - \frac{y^2}{4} = 1$ represents a

A) circle

B) parabola

C) ellipse

D) hyperbola

Understand It with Pulse | Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.



Question 7

The vertex of $x = (y + 1)^2 + 3$ is

A) $(3, -1)$

B) $(-1, 3)$

C) $(3, 1)$

D) $(-3, -1)$

Understand It with Pulse | Flag a mistake

Question 8

For $\frac{x^2}{25} + \frac{y^2}{16} = 1$, the major axis length is ____.

Understand It with Pulse | Flag a mistake



Question 9

The value of p for $x^2 = 12y$ is ____.

Understand It with Pulse | Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

Question 10

The distance between $(3,\ 4)$ and $(3,\ 9)$ is ____.

Understand It with Pulse | Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.