MICHIGAN 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 $x^2/16 + y^2/25 = 1$, the major vertices are

- **A** $(\pm 4, 0)$
- **B** $(0, \pm 4)$
- **C** $(0, \pm 5)$
- **D** $(\pm 5, 0)$

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**2** For $x^2/16 + y^2/25 = 1$, the foci are

- **A** $(\pm 3, 0)$
- **B** $(0, \pm 3)$
- **C** $(0, \pm 4)$
- **D** $(\pm 4, 0)$

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**3** The asymptotes of $y^2/9 - x^2/4 = 1$ are

- **A** $y = \pm \frac{2}{3x}$
- **B** $y = \pm \frac{3}{2x}$
- **C** $y = \pm \frac{9}{4x}$
- **D** $y = \pm \frac{4}{9x}$

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

- A 10
- B 14
- C 48
- D 100

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

- A (1, 3)
- B (3, 1)
- C (1, 2)
- D (2, 3)

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6 **The equation $x^2/9 - y^2/4 = 1$ represents a**

A circle

B parabola

C ellipse

D hyperbola

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

A (3, -1)

B (-1, 3)

C (3, 1)

D (-3, -1)

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8 **For $x^2/25 + y^2/16 = 1$, the major axis length is ____.**

ANSWER _____

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

ANSWER _____

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10 **The distance between (3, 4) and (3, 9) is ____.**

ANSWER _____

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## ANSWER KEY

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

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