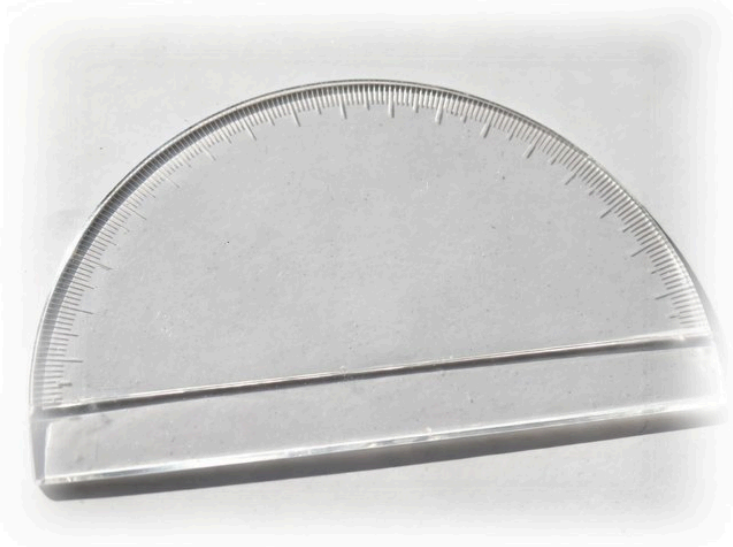
NEBRASKA ALGEBRA 2 · UNIT 2 · 5 QUESTIONS

Polynomials and Rational Functions — 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 **A clear plastic semicircular protractor lies flat on a plain white surface. The degree of $x^3 - 2x + 5$ is**



A 2

B 5

C 3

D 1

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2 **If $f(x) = 2x^3 - x^2 + 4$, then the remainder when $f(x)$ is divided by $x - 1$ is**

- **A** 5
- **B** 1
- **C** 7
- **D** 3

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3 **A factored form of $x^2 - 7x + 12$ is**

- **A** $(x - 3)(x - 4)$
- **B** $(x - 3)(x + 4)$
- **C** $(x + 3)(x - 4)$
- **D** $(x + 3)(x + 4)$

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4 The vertical asymptote of $y = \frac{2x}{x + 5}$ is

- **A** $y = 2$
- **B** $x = 5$
- **C** $x = -5$
- **D** $x = 2$

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5 The horizontal asymptote of $y = \frac{5x^2 - 1}{2x^2 + 3}$ is

- **A** $y = 5$
- **B** $y = 2$
- **C** $y = \underline{5}$
- **D** $y = \underline{2}$

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ANSWER KEY

1. C
2. A
3. A
4. C
5. C

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