Name: _____   Date:

Course: _____

College Algebra

Preliminary Assessment #3

Directions: Find the quotient for the following problems using synthetic division. Provide complete responses to each question. Make sure to show your work.

1. $x^5 - 4x^3 + x$ *divided by* $x + 3$

2. $3x^4 - 6x^3 - 5x + 10$ *divided by* $x - 2$

3. $2x^4 - x^3 + 2x - 1$ *divided by* $x - \frac{1}{2}$

4. $3x^4 + x^3 - 3x + 1$ *divided by* $x + \frac{1}{3}$

5. $-4x^3 + 5x^2 + 8$ *divided by* $x + 3$

6. $4x^4 - 15x^2 - 4$ *divided by* $x - 2$

7. $2x^6 - 18x^4 + x^2 - 9$ *divided by* $x + 3$

8. $x^6 - 16x^4 + x^2 - 16$ *divided by* $x + 4$

Name: _____   Date:

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