Math 3/3H Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Per:\_\_\_

3.3 Solving Rational Equations

Find the restrictions for each rational equation.

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| 1.
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| Solve each equation. |  |  |
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| 1. $\left(?\right)-\left(-4x^{3}+2x^{2}-4x+1\right)=(7x^{3}+3x^{2}-5x+6)$
 | 1. $\left(?\right)-\left(3x^{3}-7x^{2}+5x2\right)=(-6x^{3}-8x^{2}+7x-3)$
 |   |
|  |  |  |

State if the given binomial is a factor.

1. $n^{3}-3n^{2}+n-2 (n-1)$ 28. $10v^{3}-14v^{2}-13v+2 (v-2)$

Without graphing determine the end behavior. **(MUST WRITE IN LIMIT NOTATION!)**

 29. $-x^{3}$ 30. $x^{6}$ 31. $x^{5}$ 32. $-x^{4}$

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