

Name: _____

Date: _____

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| Learning Goal 3.2 | Factoring, including the factor theorem and the remainder theorem. |
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Assignment

1. Divide each of the following and provide a division statement. Identify any restrictions on the variable.
 - a. $m^2 - 7m - 11$ by $m - 8$.
 - b. $n^2 - n - 29$ by $n - 6$.
 - c. $n^2 + 10n + 18$ by $n + 5$.
 - d. $k^2 - 7k + 10$ by $k - 1$.
 - e. $2x^2 - 17x - 38$ by $2x + 3$.
 - f. $33 - 42x^2$ by $7x + 7$.
 - g. $x^3 + 7x^2 + 14x + 3$ by $x + 2$.
 - h. $z^3 - 10z^2 + 20z + 26$ by $z - 5$.
 - i. $k^3 - 30k - 18 - 4k^2$ by $3 + k$.
 - j. $-5x^2 + x^3 + 8x + 4$ by $-1 + x$.
 - k. $50p^3 + 10p^2 - 35p - 7$ by $5p - 4$