$\qquad$ GCF LCM polynomials period $\qquad$

Find the GCF (greatest common factor) and the LCM (least common multiple for each expression
Greatest Common Factor =largest numerical coefficient that divides evenly into each expression times the LOWEST power of any COMMON polynomial

Least Common Multiple = smallest common numerical coefficient product times the highest power of any polynomial factor present in BOTH polynomials

| Expression 1 | Expression 2 | Greatest Common Factor | Least Common Multiple |
| :--- | :--- | :--- | :--- |
| $4 x^{6} y^{12}(x-1)^{3}(x+2)$ | $20 x^{2} y^{120}(x+2)^{9}(x-1)$ |  |  |
| Factored form of the <br> expression | Factored form of the <br> expression | Factored form of the <br> expression | Factored form of the <br> expression |


| Expression 1 | Expression 2 | Greatest Common Factor | Least Common Multiple |
| :--- | :--- | :--- | :--- |
| $2 x^{2}-8 x$ | $3 x^{3}-48 x$ | Factored form of the <br> expression <br> expression | Factored form of the <br> expression |
| Factored form of the <br> expression |  |  |  |


| Expression 1 | Expression 2 | Greatest Common Factor | Least Common Multiple |
| :--- | :--- | :--- | :--- |
| $2 x^{2}-8 x-12$ | $x^{3}-36 x$ | Factored form of the <br> expression <br> expression | Factored form of the <br> expression <br> expression |
| Factored form of the |  |  |  |


| Expression 1 $2 x^{2} y$ | Expression 2 | Greatest Common Factor | Least Common Multiple |
| :--- | :--- | :--- | :--- |
| $8 x^{4} y-64 x y$ | Factored form of the <br> expression | Factored form of the <br> expression |  |
| Factored form of the <br> expression <br> expression | Factored form of the |  |  |


| Expression 1 | Expression 2 | Greatest Common Factor | Least Common Multiple |
| :--- | :--- | :--- | :--- |
| $x^{2}-2 x-10$ | $16 x^{3}-400 x$ | Factored form of the <br> expression | Factored form of the <br> expression <br> Factored form of the <br> expression |


| Expression 1 | Expression 2 | Greatest Common Factor | Least Common Multiple |
| :--- | :--- | :--- | :--- |
| $2 x^{2}-2 x-12$ | $3 x^{3}-3 x^{2}-18 x$ | Factored form of the <br> expression <br> expression | Factored form of the <br> expression |
| Factored form of the <br> expression |  |  |  |


| Expression 1 | Expression 2 | Greatest Common Factor | Least Common Multiple |
| :--- | :--- | :--- | :--- |
| $2 x^{2}-4 x+2$ | $4 x^{4}-4 x^{2}$ | Factored form of the <br> expression <br> Factored form of the <br> expression | Factored form of the <br> expression |

