## HOMEWORK 3.0-Operations with Polynomials

Name: $\qquad$ Date: $\qquad$ Period: $\qquad$

Perform each operation.

| 1. $\left(4 x^{3}-12 x\right)+\left(-6 x+12 x^{3}-3\right)$ | 2. $\left(-7-3 x^{2}-6 x^{3}\right)+\left(6 x^{2}+10+10 x^{3}\right)$ |
| :---: | :---: |
| 3. $\left(6 a-7 a^{4}-14\right)-\left(4 a^{3}+3 a^{4}-5 a\right)$ | 4. $\left(3 x^{2}+x^{4}-6 x+2\right)-\left(15 x^{4}+2 x^{3}-6 x^{2}+5 x-3\right)$ |
| 5. $-\left(3 y^{5}+6 y^{4}-7 y^{3}-5\right)+\left(y^{5}-y^{4}+3 y^{2}-2 y-8\right)$ | 6. $\left(3 x^{2} y\right)\left(5 x^{3} z\right)$ |
| 7. $\left(2 x^{2} y^{2}\right)\left(4 x y^{5} z^{3}\right)\left(-3 x^{5} y^{10} z^{18}\right)$ | 8. $4 a\left(a^{2}-2\right)$ |


| 9. $4 x^{2}\left(3 x-y+5 x^{2} y\right)$ | 10. | $(4 x+5)(3 x-2)$ |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| $11 . \quad(-5 x+7)^{2}$ | 12. | $\left(x^{2}-2\right)\left(4 x^{2}-3 x+2\right)$ |  |
| 13. |  |  |  |

