Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Hour\_\_\_\_\_\_\_\_\_\_\_\_

Exponent Properties Study Guide

Level 1- Beginning

|  |  |  |  |
| --- | --- | --- | --- |
| $$3^{3}$$ | $$a^{0}$$ | $$2x^{4}- 5x^{4}$$ | $$3d^{3}e^{2}+6d^{3}e^{2}$$ |

Level 2- Developing

|  |  |  |  |
| --- | --- | --- | --- |
| $$3x^{2}∙4x^{5}$$ | $$2m^{3}n^{5}∙7m^{6}n^{8}$$ | $$\frac{6j^{8}}{2j^{3}}$$ | $$\frac{4f^{10}d^{4}}{8f^{12}d^{4}}$$ |

Level 3- Proficient

|  |  |  |  |
| --- | --- | --- | --- |
| ($-4b^{6}c^{-2})^{4}$ | ($e^{4}f^{-1}∙-2ef^{-3})^{4}$ | $$\frac{3j^{8}}{2j^{3}∙6j^{5}}$$ | $$\frac{a^{-5}b^{-3}}{5a^{-8}b^{4}}$$ |

Level 4- Mastery

|  |  |  |  |
| --- | --- | --- | --- |
| $$\frac{4x^{3}}{2x}∙(3x^{-5}y^{0})$$ | $$(3x^{-2}y^{4})^{-3}∙4xy^{8}$$ | $$\left(\frac{x^{7}y^{3}}{(5x^{2}y^{-3})^{2}}\right)^{3}$$ | $$\left(\frac{2x^{-3}y^{4}}{(-4x^{3}y^{2})^{-2}}\right)^{-2}$$ |