Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_\_\_\_

Exponential Functions Learning Targets Formative Scores: #1:\_\_\_\_\_ #2:\_\_\_\_\_ #3:\_\_\_\_\_ #4:\_\_\_\_\_ #5:\_\_\_\_\_ #6:\_\_\_\_\_

HW #6

**Learning Target #1:** “I can apply the rules of exponents.” N-RN.1, N-RN.2

|  |  |  |  |
| --- | --- | --- | --- |
| 1. $s^{3}∙s^{4}=$
 | 1. $\left(3w\right)^{3}$
 | 1. $\frac{z^{9}}{ z^{3}}$
 | 1. $a^{12}a^{15}=$
 |
| 1. $\frac{3c^{7}}{ 6c^{2}}$
 | 1. $t∙t^{5}∙t^{2}=$
 | 1. $\left(3h^{8}\right)^{3}$
 | 1. $\frac{12d^{8}}{ 6d^{14}}$
 |
| 1. $13\left(y^{2}\right)^{5}$
 | 1. $\frac{15r^{6}}{ 3r^{4}}$
 | 1. $2s^{7}∙p^{3}∙s^{4}∙p=$
 | 1. $\left(\frac{2x^{3}}{y^{2}}\right)^{3}$
 |

1. Write 3 different exponential expression that simplify to $x^{5}$.
	1. Involving Multiplication:
	2. Involving Division:
	3. Involving a Power of a power (Grouping):
2. Explain the difference between $4x $and $x^{4}.$

Review Inequalities:

**Learning Target #2:** “I can create, solve, and graph inequalities in one variable.” A-CED.1, A-REI.3

1. Solve the linear inequality and graph the solution set. 2*x* − 5 > 3

**Learning Target #3:** “I can create, solve, and graph inequalities in two variables.” A-REI.12

1. Write the linear inequality that is represented by this graph.



**Learning Target #4:** “I can graph the solution set to a system of linear inequalities in two variables.” A-REI.12

1. Graph this linear system of inequalities. Be sure to only shade the solution region (the region that makes BOTH inequalities true).

$$y\geq x+2$$

$$y<3x-4$$



Review Linear Functions:

1. Write the equation of the line that travels through the points $\left(-1, 5\right) and \left(2, -4\right)$