Week 3 - Weekly Homework $8^{\text {th }}$ Grade

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

1. Simplify each expression. LEAVE YOUR ANSWERS IN POSITIVE EXPONENTIAL FORM.
a. $r^{5} \cdot r^{5}=$
b. $4^{14} \cdot 4^{-3}=$
2. Find the slope AND equation for the graph below.

3. Find the slope using the two given points: $(-4,6)$ and $(2,8)$
4. Solve for $y$ and identify the equation type:

$$
10 y+3+15=10 y-4
$$

a. answer:
b. equation type: consistent, inconsistent or identity?
c. number of solutions:
5. Solve for $y$ AND fill in the missing values in the table: $\quad 7 y=21+10 x+7-3 x$

| $\mathbf{x}$ | 0 |  | 10 |  |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{y}$ |  | 6 |  | 16 |

6. Use the table of values to answer the following:

| $\mathbf{x}$ | 0 | 5 | 7 | 9 | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{y}$ | 7 | 27 | 35 | 43 | 55 |

a. Find the equation that matches the table. (Should be in $\mathrm{y}=$ format)
b. Is this a slope-intercept equation or a direct proportion equation? How do you know?

