## Lesson 6 Practice Problems

1. Solve each of these equations. Explain or show your reasoning.

$$
2 b+8-5 b+3=-13+8 b-5 \quad 2 x+7-5 x+8=3(5+6 x)-12 x
$$

$$
2 c-3=2(6-c)+7 c
$$

2. Solve each equation and check your solution.

$$
-3 w-4=w+3
$$

$$
3(3-3 x)=2(x+3)-30
$$

$$
\frac{1}{3}(z+4)-6=\frac{2}{3}(5-z)
$$

3. Elena said the equation $9 x+15=3 x+15$ has no solutions because $9 x$ is greater than $3 x$. Do you agree with Elena? Explain your reasoning.
4. The table gives some sample data for two quantities, $x$ and $y$, that are in a proportional relationship.
a. Complete the table.
b. Write an equation that represents the relationship between $x$ and $y$ shown in the table.
c. Graph the relationship. Use a scale for the axes that shows all the points in the table.

| $x$ | $y$ |
| :---: | :---: |
| 14 | 21 |
| 64 |  |
|  | 39 |
| 1 |  |


(From Unit 3, Lesson 3.)

