$\qquad$ / $\qquad$
Name: $\qquad$ Period: $\qquad$ Due: $\qquad$
Percent: $\qquad$ $=\frac{}{10}$

Use a model to simplify the following expressions.

1. $7(x+4)$
2. $2(-3-3 x)$
3. $3(5 y+x)$
4. $5(4 x-3 y)$

Simplify the following expressions. You may use a model if you wish

| 5. $-2(m-3)$ | 6. $3(2 m+7)+4$ |
| :--- | :--- |
| 7. $-(n-6)$ | 8. $-\frac{1}{2}\left(\frac{1}{3} m-\frac{2}{5}\right)$ |
| 9. $(b-8) 4$ | 10. $\frac{2}{5}(3 m-6)$ |


| 11. $(3-x) 3 y$ | $12.8-4 x+2$ |
| :--- | :--- |
|  |  |

13. You and a fellow castaway are stranded on an island, playing dice for the last seat on the rescue boat. You've agreed on these rules:

- You'll roll two dice
- If the greatest number is $1,2,3$, or 4 then Player 1 wins
- If the greatest number is 5 or 6 , then Player 2 wins
a. Give three possible outcomes that would have Player 1 win.
b. Give three possible outcomes that would have Player 2 win.
c. Which player would you rather be? Justify your answer using math concepts we've talked about this year.

