$\qquad$ DATE $\qquad$ PERIOD $\qquad$

## Math 7 Chapter 5 Practice Test

1. The Garcia family's piñata order is 5 snickers and 4 jolly ranchers. The Thompson family's order is 6 snickers and 1 jolly rancher. How many snickers and how many jolly ranchers are needed to fill the orders?
2. Simplify $5 \mathrm{x}+8+2 \mathrm{x}-7$.
3. What is the value of $9+3(5-3)-6$ ?
4. What is the value of $5 \mathrm{a}+7 \mathrm{~b}$ if $\mathrm{a}=4$ and $\mathrm{b}=6$ ?
5. What is the value of $6 x-3 y$ if $x=4$ and $y=-1$ ?
6. What are the next three terms in the sequence $3,6,9,12, \ldots$ ?
7. What is the next term in the pattern $0.2,0.4,0.6,0.8, \ldots$ ?
8. Which expression is equivalent to $4(x+10)$ ? Hint: write $(x+10)$ four times:
$(\quad)+($
) + (
) + (
)
A. $4 x+40$
B. $4 \mathrm{x}+10$
C. $4 \mathrm{x}+20$
D. $4 x-40$
9. What is $-2 \mathrm{y}+11+2 \mathrm{y}-8$ simplified?
10. The expression $4 x+8$, shown here with tiles, can be factored into which of the following expressions?

| x | x | 1 | 1 | 1 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| x | x | 1 | 1 | 1 | 1 |

A. $4(x+8)$
B. $2(x+4)$
C. $2(2 x+4)$
D. $4(2 x+2)$
11. $\operatorname{Add}(10 x+2)+(9 x-4)$.
12. Subtract $(8 x+6)-(x-3)$.
13. Simplify the expression $8(3 x+2)+3(2 x+5)$.
14. The area of a rectangular pool is $(21 x+12)$ square units. Factor $21 x+12$ to find possible dimensions of the pool. Draw a picture to support your answer.
15. Factor each of the following:
a. $6 x-15$
b. $7 x+20$
c. $8+28 x$

