## Unit 4 Ind Study Guide

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

- You will not be allowed a calculator on this test.

Solve then graph your solution on a numberline.

1. $4 x+5-(2 x+3) \geq 3 x-(x+2)+4$
2.) What values of $x$ make the equation below true?

3.) According to the scale on a map, 1 inch on the map $=20$ miles. How many inches on the map would represent 44 miles?
4.) Six kids got to go to the water park for $\$ 33$. How many students could go for $\$ 247.50$ ?

Simplify 5 \& 6 without a calculator.
5. $5+3 \cdot(6-3 \cdot 3)(6-3 \cdot 3)$
6. If $x=4, y=-2 ; z=-3$

$$
\frac{-y^{2}(x z-5 y)}{3 x-4 y}
$$

For 7 \& 8, evaluate the expressions.
7. For $c=d(7.85)$, find $c$ when $d=30$.
8. For $y=5 x+(-8)$, find $y$ when $x=-4$.
9) Build the equation shown below using an equation mat and tiles. Simplify as much as possible and record the groups of tiles that remain after each step is taken. Use the fact that both sides are equal to solve for $x$. You may show your work by writing on the mat or by setting up a table.


Use the information below to answers questions 10-11.
Maria has two spinners to use to pick the vehicle he can use for work. One spinner is divided into equal sections for sedan, truck, and van. The other spinner has equal parts for the colors green, blue, red, silver, and purple.
10. What is the probability of spinning a silver van?
11. What is the probability of spinning a blue sedan or green truck?

IUse the figure at right to answer questions 12 - 14.
12. Find the area of the figure at right.

13. Find the perimeter of the figure at right.
14. Find the area and the perimeter if $x=2.5$

