Name $\qquad$ Date $\qquad$ Period $\qquad$

1. Simplify. $-9(7)^{2}+9(7)+320$
2. Solve. $\frac{12}{x+8}=\frac{8}{3 x-4}$
3. Write an equation of a line in slope intercept form.
a. $\quad m=\frac{-3}{2}(8,-12)$
b. $(10,-6)(-5,-15)$
4. There's a sale at the local candy shop. If you buy a Pez dispenser, you get a great discount on the Pez candy. Rick took advantage of the deal and bought 18 packs of candy with the dispenser for $\$ 4.55$. Shawn did the same, and bought 27 packs with the dispenser for $\$ 5.90$.
a. How much was the Pez dispenser?
b. How much was each pack of candy?

Name $\qquad$ Date $\qquad$ Period $\qquad$
Write a system of equations to solve the problem.
5. The math club and the science club had fundraisers to buy supplies for a hospice. The math club spent $\$ 135$ buying six cases of juice and one case of bottled water. The science club spent $\$ 110$ buying four cases of juice and two cases of bottled water. What is the cost of each case of juice and water?

## Solve the systems of equations using any method.

6. $x-2 y=8$
$5 x+3 y=1$
7. $6 x+2 y=14$
$y=-3 x+7$


