## Name

Date $\qquad$ Period $\qquad$
Graph each linear equation

1. $y=\frac{2}{3} x-8$


Calculate the slope of the line through the two ordered pairs.
3. $(3,10)$ and $(6,4)$
4. $(-3,8)$ and $(7,3)$
2. $4 x+8 y=24$

5. Write the equation of a line with a slope of $\frac{3}{4}$ and a $y$-intercept of 9 .
6. Write the equation of a line with a slope of $\frac{2}{3}$ through the point $(6,2)$
7. Write the equation of a line through the points $(4,5)$ and $(8,3)$
8. Solve the system of equations using any method.
$\left\{\begin{array}{l}y=2 x-8\end{array}\right.$
$\{2 x+3 y=24$

9. The chess club has 16 members and gains a new member every month. The film club has 4 new members and gains 4 new members every month. Write and solve a system of equations to find when both clubs will have the same number of members.
10. This year Pleasant Valley and Bettendorf decided to take a field trip to the state fair. Pleasant Valley rented and filled 8 vans and 8 buses with 240 students total. Bettendorf rented and filled 4 vans and 1 bus with 54 students total. Find the number of students in each van and in each bus.

