Use the following coordinates for 1-5. $(-3,-6)$ and $(3,-2)$

1. Plot the two points in the coordinate plane. Draw the line that contains the two points.
2. Find the slope of the line.
3. Find the $y$-intercept of the line.
4. Find the $x$-intercept of the line.
5. Write the equation of the line in slope-intercept form.

## Use the following coordinates for 6-10.

$(1,-6)$ and $(-2,3)$
6. Plot the two points in the coordinate plane. Draw the line that contains the two points.
7. Find the slope of the line.
8. Find the $y$-intercept of the line.
9. Find the $x$-intercept of the line.
10. Write the equation of the line in slopeintercept form.



Graph both of the given equations. Find the intersection of the lines.
11. $y=-\frac{1}{4} x+2, y=-x-1$

12. $y=-2 x-3, \quad y=5 x+4$

13. $y=\frac{3}{2} x-4, \quad y=-1$


Solve each equation.
14. $7 x+12+5 x+7=9+10 x+8$
15. $3(1-6 x)-x=-130$
16. $-14+6 x+4=2(-5+3 x)$
17. $\frac{1}{2}(16+8 x)=9 x-7$
18. $4(6-x)=-12(x-2)$
19. $2(x+5)-3(-1-3 x)=11 x-1$

Simplify if possible.
20. $\sqrt{225}$
21. $\sqrt{72}$
22. $\sqrt{320}$
23. $\sqrt{126}$
24. $\sqrt{94}$
25. $\sqrt{243}$
26. $\sqrt{1000}$
27. $\sqrt{540}$

