Solve each equation. Check your answer.

1. $5 a+2=7$
2. $2 x+3=7$
3. $3 b+6=12$
4. $9=5+4 t$
5. $4 a+1=13$
6. $-t+2=12$

## Define a variable and write an equation to model each situation. Then solve.

7. You want to buy a bouquet of yellow roses and baby's breath for $\$ 16$.

The baby's breath costs $\$ 3.50$ per bunch, and the roses cost $\$ 2.50$ each.
You want one bunch of baby's breath and some roses for your bouquet. How many roses can you buy?
8. Suppose you walk at the rate of $210 \mathrm{ft} / \mathrm{min}$. You need to walk $10,000 \mathrm{ft}$. How many more minutes will it take you to finish if you have already walked 550 ft ?
9. To mail a first class letter, the U.S. Postal Service charges $\$ .34$ for the first ounce and $\$ .21$ for each additional ounce. It costs $\$ 1.18$ to mail your letter. How many ounces does your letter weigh?
10. Suppose you want to buy one pair of pants and several pairs of socks. The pants cost $\$ 24.95$, and the socks are $\$ 5.95$ per pair. How many pairs of socks can you buy if you have $\$ 50.00$ to spend?

Solve each equation. Check your solution.
11. $5.8 n+3.7=29.8$
12. $67=-3 y+16$
13. $-d+7=3$
14. $\frac{m}{9}+7=3$
15. $6.78+5.2 x=-36.9$
16. $5 z+9=-21$
17. $3 x-7=35$
18. $36.9=3.7 b-14.9$
19. $4 s-13=51$
20. $9 f+16=70$
21. $11.6+3 a=-16.9$
22. $-9=-\frac{h}{12}+5$
23. $-c+2=5$
24. $-67=-8 n+5$
25. $22=7-3 a$
26. $\frac{k}{3}-19=-26$
27. $-21=\frac{n}{3}+2$
28. $3 x+5.7=15$
29. $\frac{a}{5}-2=-13$
30. $2 x+23=49$
31. $\frac{x}{2}+8=-3$

