Solve the equation. Check your solution. (Section 1.3)

1. $2(x+4)=-5 x+1$
2. $\frac{1}{2} s=4 s-21$
3. $8.3 z=4.1 z+10.5$
4. $3(b+5)=4(2 b-5)$

Solve the equation. Graph the solutions, if possible. (Section 1.3)
5. $|d+10|=6$
6. $-4|w-1|=-8$

Solve the equation for $\boldsymbol{y}$. (Section 1.4)
7. $6 x-3 y=9$
8. $8=2 y-10 x$

## Solve the formula for the red variable. (Section 1.4)

9. Volume of a cylinder: $V=\pi r^{2} h$
10. Area of a trapezoid: $A=\frac{1}{2} h(b+B)$
11. TEMPERATURE In which city is the water temperature higher? (Section 1.4)
12. INTEREST The formula for simple interest $I$ is $I=$ Prt. Solve the formula for the interest rate $r$. What is the interest rate $r$ if the principal $P$ is $\$ 1500$, the time $t$ is 2 years, and the interest earned $I$ is $\$ 90$ ? (Section 1.4)

13. ROUTES From your home, the route to the store that passes the beach is 2 miles shorter than the route to the store that passes the park. What is the length of each route?
(Section 1.3)
14. PERIMETER Use the triangle shown. (Section 1.4)
a. Write a formula for the perimeter $P$ of the triangle.
b. Solve the formula for $b$.
c. Use the new formula to find $b$ when $a$ is 10 feet and $c$ is 17 feet.


Perimeter $=42$ feet

