Solve the equation. (See Examples 1 and 2.)

▶ **1.** $m - 4 = 2m$

2. $3k - 1 = 7k + 2$

▶ **3.** $12(2w - 3) = 6w$

4. $-24 - 8p = 4p$

5. $2(4z - 1) = 3(z + 2)$

6. $0.1x = 0.2(x + 2)$

7. Write and solve an equation to find the number of minutes you must ride to have the same cost for each of the electric scooter rentals.

$1.00 plus **$0.30** per minute

$1.50 plus **$0.25** per minute

Solve the equation. (See Examples 3 and 4.)

8. $3x + 15 = 3(x + 5)$

▶ **9.** $3x - 1 = 1 - 3x$

10. $5.5 - x = -4.5 - x$

▶ **11.** $-3(2x - 3) = -6x + 9$

12. $2x + 4 = -(-7x + 6)$

13. $10x - \dfrac{8}{3} - 4x = 6x$

14. YOU BE THE TEACHER Your friend solves the equation shown. Is your friend correct? Explain your reasoning.

$-4(2n - 3) = 12 - 8n$
$-8n + 12 = 12 - 8n$
$-8n = -8n$
$0 = 0$
The solution is $n = 0$.

15. OPEN-ENDED Write an equation with variables on both sides that has no solution. Explain why it has no solution.

16. CONNECTING TO REAL LIFE Your neighbor subscribes to the satellite provider the same month you subscribe to the cable provider. After how many months is your neighbor's total cost the same as your total cost when your neighbor owns three televisions?

SATELLITE TV
Only **$13.32** per television per month
Free installation!

CABLE TV
Only **$39.96** per month
Plus **$75** installation

RESOURCES