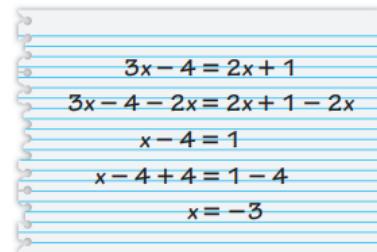


Section 1.3: Solving Equations With Variables on Both Sides

Name: \_\_\_\_\_

Practice: #20, 21, 26, 28, 39, 45

20. Your friend solves the equation shown. Is your friend correct? Explain your reasoning.


$$\begin{aligned}3x - 4 &= 2x + 1 \\3x - 4 - 2x &= 2x + 1 - 2x \\x - 4 &= 1 \\x - 4 + 4 &= 1 + 4 \\x &= -3\end{aligned}$$

21. Write and solve an equation to find the number of miles you must drive to have the cost for each of the car rentals.



\$20 plus \$0.50 per mile



\$30 plus \$0.25 per mile

same

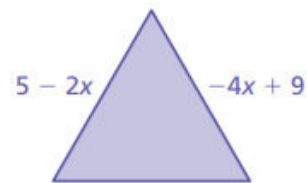
26. Solve the equation. Check your solution if possible.

$$\frac{1}{3}(9x + 3) = 3x + 1$$

28. Solve the equation. Check your solution if possible.

$$\frac{1}{2}x + \frac{1}{2}x = x + 1$$

39. Find the perimeter of the regular polygon.



45. Fill in the blanks in three different ways to create an equation that has one solution, no solution, and infinitely many solutions.

One Solution

$$7x + 3x + 10 = -2(\text{ } x + \text{ })$$

No Solutions

$$7x + 3x + 10 = -2(\text{ } x + \text{ })$$

Infinitely Many Solutions

$$7x + 3x + 10 = -2(\text{ } x + \text{ })$$