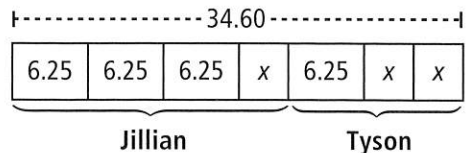


54. **Think About a Plan** Jillian and Tyson are shopping for knitting supplies. Jillian wants 3 balls of yarn and 1 set of knitting needles. Tyson wants 1 ball of yarn and 2 sets of knitting needles. Each ball of yarn costs \$6.25. If their total cost is \$34.60, what is the cost of 1 set of knitting needles?

- How can the model at the right help you solve the problem?
- How does the model tell you which operations to use in the equation?



55. **Online Video Games** Angie and Kenny play online video games. Angie buys 1 software package and 3 months of game play. Kenny buys 1 software package and 2 months of game play. Each software package costs \$20. If their total cost is \$115, what is the cost of one month of game play?

56. **Error Analysis** Describe and correct the error in solving the equation at the right.

$$\begin{aligned} \frac{3x}{8} - 1 &= \frac{5}{8} \\ 8\left(\frac{3x}{8} - 1\right) &= 8\left(\frac{5}{8}\right) \\ 3x - 1 &= 5 \\ 3x &= 6 \\ x &= 2 \end{aligned}$$

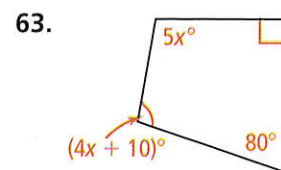
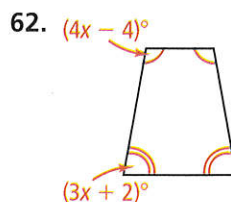
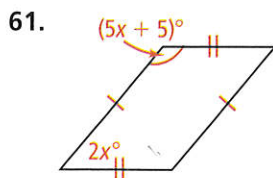
57. **Reasoning** Suppose you want to solve  $-4m + 5 + 6m = -3$ . What would you do as your first step? Explain.

58. **Writing** Describe two ways in which you can solve  $-\frac{1}{2}(5x - 9) = 17$ .

59. **Bowling** Three friends go bowling. The cost per person per game is \$5.30. The cost to rent shoes is \$2.50 per person. Their total cost is \$55.20. How many games did they play?

60. **Moving Expenses** A college student is moving into a campus dormitory. The student rents a moving truck for \$19.95 plus \$.99 per mile. Before returning the truck, the student fills the tank with gasoline, which costs \$65.32. The total cost is \$144.67. How many miles did the student drive the truck?

**Geometry** Find the value of  $x$ . (*Hint: The sum of the angle measures of a quadrilateral is  $360^\circ$ .*)



64. **Dining Out** You are ordering a meal and have \$15 to spend. The restaurant charges 6% sales tax. You plan to leave a 15% tip. The equation  $c = x + 0.06x + 0.15x$  gives the total cost  $c$  of your meal, where  $x$  is the cost before tax and tip. What is the maximum amount you can spend before tax and tip?

65. **Savings** You have \$85 in your bank account. Each week you plan to deposit \$8 from your allowance and \$15 from your paycheck. The equation  $b = 85 + (15 + 8)w$  gives the amount  $b$  in your bank account after  $w$  weeks. How many weeks from now will you have \$175 in your bank account?