

Solving Multi-Step Equations—Day 2
 Extra Practice **Homework**

Name KEY
 Date _____ Period _____

For each situation 1 - 2, choose an equation that could be used to find the solution. Solve the equation you selected.

1. ⁶ Bonnie and her 5 friends borrowed m dollars from Bonnie's mom. They made 9 dollars on a bake sale and gave it to her. They evenly split the amount of money they still owe Bonnie's mom, and found they each owe her 15 dollars. How much money did Bonnie and her friends borrow from Bonnie's mom? m : \$ borrowed

A. $\frac{m+(-9)}{6} = 15$ B. $\frac{9}{6} + m = 15$ C. $\frac{9-m}{6} = 15$ D. $\frac{m+9}{6} = 15$

$\frac{(m-9)}{6} = 15$

2. Carla needs to transport 8 soccer teams to the tournament across town. Two of the players are sick and can not come. Carla split the players into 10 vans. There are 7 players in each van. How many players p are on each team?

A. $\frac{8-2p}{10} - p = 7$ B. $\frac{8-2}{10} - p = 7$ C. $8p-2 = \frac{7}{10}$ D. $\frac{8p-2}{10} = 7$

8 teams
 p = # player
 $8p - 2$ (2 sick)
 $\frac{8p-2}{10} = 7$

3. Andrew bought some candy. He divided it into 3 bags and then ate 2 pieces of candy from one bag. He now has 113 pieces of candy in that bag. How many pieces of candy did Andrew have at the start? Write and solve an equation to support your answer. c : candy, t : total pieces

$\frac{c}{3} - 2 = 113$
 $\frac{c}{3} + 2 = 115$
 $3 \mid 115 = 38 \text{ R } 1$
 $c = 117$

$t = \frac{c}{3} - 2$ $t = 113$
 $t = 345 \text{ pieces}$

4. 7 cases of crackers containing an unknown number of packages were purchased for the after-school program. When the boxes were opened, 5 packages were crushed and could not be used. The remaining packages were distributed to 8 group leaders. Each group got 9 packages of crackers. How many packages p were in each case? Write and solve an equation to support your answer. p : packages, c : case

$p = \frac{7c-5}{8}$
 $(8) 9 = \frac{7c-5}{8} (8)$

$72 = 7c - 5$
 $+5$
 $77 = 7c$
 $11 = c$

11 packages in each case