

Lesson 7.3

Skills Practice

Name _____ Date _____

Planning a Graduation Party

Solving Two-Step Equations

Vocabulary – Give an example of a two-step equation and describe how to solve it.

Problem Set

Write a sentence to describe how to apply inverse operations to solve each equation. Then, solve each two-step equation.

SHOW YOUR WORK. CHECK YOUR WORK.

<p>1. $4x+12=24$ First subtract 12 from each side, then divide each side by 4. $4x+12=24$ $4x+12-12=24-12$ $4x=12$ $4x/4=12/4$ $x=3$ $4(3)+12=24$ $12+12=24$ $24=24$</p>	<p>2. $25 - 8x = -15$</p>
<p>3. $13 - x/7 = 6$</p>	<p>4. $-5x - 12 = 18$</p>

5. $x/9 + 19 = 41$

6. $42 = -7x + 35$

7. $-8 = 2x - 14$

8. $21 = 36 - x/30$

9. $-19 = 35 + 9x$

10. $11x + 13 = -9$

Write an equation to represent the situation. Define your variables, solve the equation, and verify your solution.

11. Ms. Moderelli charges her piano students \$40 per lesson plus a semester recital fee of \$55. How many lessons did Jerry take if he paid \$695 for lessons this semester?

Let p = number of lessons

$$40p + 55 = 695$$

$$40p + 55 - 55 = 695 - 55$$

$$40p = 640$$

$$40p/40 = 640/40$$

$$p = 16$$

$$40(16) + 55 = 695$$

$$640 + 55 = 695$$

$$695 = 695$$

Jerry took 16 lessons.

12. The Sunshine Nursery offers a spring flower deal. If a customer purchases at least one flat of 6 annuals, they will receive 3 free perennials. How many flats of annuals must you buy to get a total of 21 plants?

13. The student council ordered 1000 pencils embossed with the school name to give to honor roll students. If they give each honor roll student two pencils and they have 840 pencils left after the first quarter, how many students are on the honor roll for the first quarter?

14. Craig and four of his friends had a car wash to earn some extra money. They split the profits. Craig got an extra \$18 to repay his parents for the car wash supplies. If Craig got \$32, how much total money did they split among themselves?

15. Javier has a collection of 125 comic books. He gives each of his 3 friends the same number of comic books and keeps his favorite 38 comic books for himself. How many comic books did he give to each of his friends?

16. Tyler is planning a party at a restaurant. There is a flat fee of \$250 to reserve the restaurant for the evening and a charge of \$20 per person for food and drink. If Tyler has \$500 to spend, what is the maximum number of people that can attend the party?