Name _____ Date _____

1.1 Practice B

In Exercises 1–6, solve the equation. Justify each step. Check your solution.

1. $p + 7 = -9$

2. $0 = k - 2$

3. $-10 = w + 1$

4. $g + (-3) = 4$

5. $-14 = -9 + q$

6. $s - (-12) = 15$

7. Shopping online, you find a skateboard that costs $124.99, which is $42.50 less than the price at a local store. Write and solve an equation to find the local price.

In Exercises 8–13, solve the equation. Justify each step. Check your solutions.

8. $-32 = 4y$

9. $r \div (-8) = 5$

10. $\dfrac{k}{3} = 4$

11. $\dfrac{z}{-2} = 7$

12. $9 = b \div (-1)$

13. $-100 = \dfrac{p}{10}$

In Exercises 14–19, solve the equation. Check your solution.

14. $k - \dfrac{4}{7} = \dfrac{2}{7}$

15. $-\dfrac{2}{9}d = 18$

16. $h + \dfrac{\pi}{2} = \dfrac{3\pi}{2}$

17. $5t = -7.5$

18. $4 + 12 \div 2 = -5v$

19. $a + 8 = 9 \times 3 - 10$

20. Describe and correct the error in solving the equation.

$$\times \qquad -\dfrac{2}{3}p = 4$$
$$-\dfrac{2}{3}p + \dfrac{2}{3} = 4 + \dfrac{2}{3}$$
$$p = 4\dfrac{2}{3}$$

21. As c decreases, does the value of x *increase, decrease,* or *stay the same* for each equation? Assume c is positive.

Equation	Value of x
$x + c = 0$	
$-cx = -c$	
$\dfrac{x}{c} = 1$	

22. One-fifth of the plants in a garden are grape tomato plants. Two-ninths of the plants in the garden are cherry tomato plants. The garden has 18 grape tomato plants and 20 cherry tomato plants. How many other plants are in the garden? Explain.