

Simplify.

1. $16 + p + q + 5p + q + 21$

2. $25 \cdot 12 \cdot 4$

3. $-5 + [-9 + (-9)]$

4. $3n - 6 + (-9)3n - 15$

5. $\left(-1\frac{3}{5}\right) + \frac{2}{5} + 1 - \frac{1}{5}$

6. $-7 + 5 - 4 - 6$

7. Samantha left home with \$42.51. The subway fare was \$1.20. At the station she bought a magazine for \$1.95. Lunch cost \$4.36. After work she bought a skirt on sale for \$26.00. Her subway fare home was also \$1.20. At the station Shelly gave Samantha \$5 to pay back a loan. How much money did Samantha have at the end of the day? \$12.80

Simplify.

8. $(25 - 31) - (-6 + 11)$

9. $x - (-8) - [x + (-8)]$

10. Kara left home $2\frac{2}{3}$ hours before she arrived at the airport. How long had she been gone from home when she had been at the airport for $1\frac{2}{3}$ hours? $4\frac{1}{3}$ h

Simplify.

11. $(23)(0.25) - (7)(0.25)$

12. $(6x + 3)4$

13. $5(b - 1) + 8$

14. $7(2c - 4d + 6)$

15. $-16(-3)$

16. $(-11 + 11)$

17. $(-9)(8)(-1)(-3)$

18. $7x - y + 2x + 3y$

19. Write an equation to represent the following relationship among integers:
The sum of three consecutive even integers is 30 more than the smallest integer. $x + (x + 2) + (x + 4) = x + 30$

20. State the reciprocal of -1 .

21. State the reciprocal of $\frac{5}{7} \cdot \frac{7}{5}$

Simplify.

22. $\left(-\frac{1}{17}\right)(85)\left(\frac{1}{5}\right)$

23. $-\frac{1}{7}(-56m + 49n)$

24. $\frac{-13}{\frac{1}{6}}$

25. $\frac{343w}{-7} - 49w$

Solve.

1. $y + 25 = 10$ {-15}

3. $c + 51 = 38$ {-13}

5. $\frac{1}{13}y = 65$ {845}

7. $-112 = 16e$ {-7}

9. $12y - 7 = 113$ {10}

11. $\frac{3x + 90}{5} = 0$ {-30}

2. $73 = h - 13$ {86}

4. $x - 38 = 12$ {50}

6. $-19v = -114$ {6}

8. $-\frac{x}{21} = 35$ {-735}

10. $\frac{2}{3}x + 6 = 16$ {15}

12. $-\frac{7}{8}(w - 16) = 70$ {-64}

13. In the game of basketball you can score one point for a foul shot, two points for a regular shot and three points for an outside shot. Manuel scored 30 points by making eight foul shots and two outside shots. How many regular shots did he make? Use the five-step plan. 8

Solve each equation. If the equation is an identity or if it has no solution, write *identity* or *no solution*.

14. $7(a - 6) = -3 + 6a$ {39}

15. $6(m - 1) = 6(m + 3)$ no solution

Solve. In Exercises 17 and 18, use a chart to help you.

16. Three times a number increased by 44 is the same as the opposite of the number. Find the number. -11
17. Sean weighs 10 lb more than twice Brad's weight. If Brad gains 10 lb, together they'll weigh 230 lb. How much does each weigh now? Brad 70 lb; Sean 150 lb
18. When Courtney collected her change she realized that she had five times as many dimes as quarters. Her dimes and quarters totaled \$5.25. How many quarters did she have? 7