CHAPTER TEST

CHAPTER 3

Simplify each expression. Justify each step.

1. $12 \cdot 7 \cdot \frac{2}{3}$
2. $39 + 52 + 11$
3. $(25 \cdot 9) \cdot 4$
4. $2.1 + (6.5 + 4.9)$

Simplify.

5. $7x + 5x$
6. $m + 3m - 3$
7. $6n + 1 - n + 5n$
8. $2y + 2z + 2$
9. $3(s + 2) - s$
10. $10b + 8(b - 1)$

Solve.

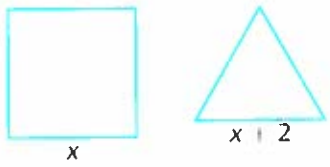
11. $10x - 2x = 16$
12. $\frac{3y}{3} + \frac{5y}{3} = 8$
13. $4c + 6 + 2c = 24$
14. $\frac{2x}{5} - \frac{3}{5} = \frac{11}{5}$
15. $\frac{2}{5}b - \frac{1}{4}b = 3$
16. $15 - 6g + 8 = 19$

17. On her last three quizzes, Elise scored 84, 96, and 88. What grade must she get on her next quiz to have an average of 90 for all four quizzes?

Solve.

18. $3x + 13 = x + 1$
19. $q + 7 = 2q + 5$
20. $8n + 24 = 3n + 59$
21. $m + 5 = m - 3$
22. $-3a + 9 = 3a - 9$
23. $\frac{3z}{2} - \frac{17}{3} = \frac{2z}{3} - \frac{3}{2}$

24. The square and the equilateral triangle have the same perimeter. Find the perimeter of each figure.



Solve and graph.

25. $-12 \geq \frac{h}{4}$
26. $-36 \leq 6y$
27. $-56 < -7m$
28. $\frac{b}{-4} < 8$
29. $n - 14 \leq -3$
30. $8 < 22 + p$
31. $-4 + u \leq -20$
32. $8 + z > -6$

33. Glenda has a $40 gift certificate to a café that sells her favorite tuna sandwich for $3.75 after tax. What are the possible numbers of tuna sandwiches that Glenda can buy with her gift certificate?

Solve and graph.

34. $6m + 4 > 2$
35. $8 - 3p > 14$
36. $4z + 4 \geq -8$
37. $\frac{x}{10} + \frac{1}{2} \geq \frac{2}{5}$
38. $\frac{3}{4} - \frac{c}{8} < \frac{1}{2}$
39. $\frac{2}{3} > \frac{1}{2} - \frac{d}{6}$