1. $a, -3a, -3a, -3a, \frac{-3a}{-3}, 5$

2. $x, x, 3x, 16, 16, 3x, 3x, -7$

3. -4 4. -1 5. 4

6. 11 7. $-4\frac{2}{3}$ 8. 6

9. 3 10. 9 11. -8

12. -4 13. 3 14. $2\frac{2}{3}$

15. 16 16. 3 17. 3 h

18. 6 19. -2 20. -3

21. -10 22. $\frac{1}{3}$ 23. 2.9

24. Answers may vary. Sample: Company A rents a stereo for $50 plus $5 per month. Company B rents the same stereo for $30 plus $10 per month. For how many months can you rent from either company and pay the same price?
$50 + 5x = 30 + 10x$; $x = 4$ months

25. $18 - n = n - 4$; 11

26. B

27. The student subtracted $4x$ from the left side of the equation instead of adding $4x$; $x = -\frac{2}{3}$

28. $27.95 + 0.12m = 12.95 + 0.32m$; 75 min

29. First use the Distributive Property on the left side. Next, get the variable on the left side only by subtracting a from each side. Then add 15 to each side. Finally, divide each side by 9.

30. 4

31. -3

32. Negative; explanations may vary. Sample: When the variable is on only one side of the equation, its coefficient is positive while the constant on the other side of the equation is negative.

33. A renter of a few movies would prefer the silver card (less expensive for fewer than 10 videos). A renter of many movies would prefer the gold card (less expensive for more than 10 videos).

34. Answers may vary. Sample: (c) add b to each side. You then have $\frac{5}{3}b = 10$, which is a one-step equation; 6.