Sixth Grade: Activity 14 Practice
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Lesson 14-1

1. **a.** let $x =$ number of points per minute
   b. $24x = 66$
   c. $x = 2.75$
   d. $24(2.75) = 66$; $66 = 66$
2. **a.** let $x =$ degrees per hour
   b. $5x = 20$
   c. $x = 4$
   d. $5(4) = 20$; $20 = 20$
3. **a.** let $x =$ score per turn
   b. $7x = 154$
   c. $x = 22$
   d. $7(22) = 154$; $154 = 154$
4. **a.** let $x =$ number of days
   b. $25x = 400$
   c. $x = 16$
   d. $25(16) = 400$; $400 = 400$
5. **a.** let $x =$ number of ounces
   b. $1{,}654x = 16{,}540$
   c. $x = 10$
   d. $1{,}654(10) = 16{,}540$; $16{,}540 = 16{,}540$
6. **a.** let $x =$ students in honors algebra
   b. $\frac{3}{4}x = 21$
   c. $x = 28$
   d. $\frac{3}{4}(28) = 21$; $21 = 21$
7. **a.** let $x =$ number of pillowcases
   b. $\frac{2}{3}x = 16$
   c. $x = 24$
   d. $\frac{2}{3}(24) = 16$; $16 = 16$
8. $x = 6$
9. $a = 4$
10. $p = 7$
11. $z = 9$

Lesson 14-2

12. **a.** let $x =$ number of bills
    b. $2x = 250$
    c. $x = 125$
    d. $2(125) = 250$; $250 = 250$
13. **a.** let $x =$ feet between windmills
    b. $16x = 6(5{,}280)$ or $16x = 31{,}680$
    c. $x = 1{,}980$
    d. $16(1{,}980) = 31{,}680$; $31{,}680 = 31{,}680$
14. **a.** let $x =$ amount of bill
    b. $0.15x = 3.30$
    c. $x = 22.00$
    d. $0.15(22) = 3.30$; $3.30 = 3.30$
15. **a.** let $x =$ cost of one donut
    b. $12x = 5.88$
    c. $x = 0.49$
    d. $12(0.49) = 5.88$; $5.88 = 5.88$
16. $x = 6$
17. $a = 19$
18. $r = 2.5$
19. $s = 64$
20. $k = 75$
21. $x = \frac{5}{6}$
22. $x = \frac{2}{3}$
23. Answers will vary.
24. Answers will vary.
25. Answers will vary.

23. There are 8 colored markers in a box and a total of 96 markers. How many boxes of markers are there?

24. Raffle tickets were being sold for $10.00 each. The sale raised $420. How many raffle tickets were sold?

25. A survey said that 4 in 5 dentists recommended Colgate to their patients. If 16 dentists recommended Colgate, how many dentists were surveyed?

Lesson 14-3

26. let $x =$ number of Euros
$\frac{x}{20} = 0.77$
$x = 15.4$
$\frac{15.4}{20} = 0.77; 0.77 = 0.77$

27. let $x =$ amount of discount
$\frac{x}{0.25} = 200$
$x = 50$
$\frac{50}{0.25} = 200; 200 = 200$

28. let $x =$ population of United States
$\frac{x}{13.7} = 23$
$x = 315.1$
$\frac{315.1}{13.7} = 23; 23 = 23$

29. let $x =$ pounds composted in 90 days
$\frac{x}{90} = 1.5$
$x = 135$
$\frac{135}{90} = 1.5; 1.5 = 1.5$

30. let $x =$ area of Texas
$\frac{x}{5} = 53{,}178$
$x = 265{,}890$
$\frac{265{,}890}{5} = 53{,}178;$
$53{,}178 = 53{,}178$

31. $x = 51$

32. $r = 54$

33. $y = 21$

34. $x = 15.2$

35. $n = 129$

36. Answers will vary.

37. Answers will vary.

38. Answers will vary.

39. Sample answer: no; for $\frac{x}{8} = 2$ the solution is 16, but for $\frac{8}{x} = 2$ the solution is 4.

40. Sample answer: yes she is correct. The solution to each equation is 64. To solve the first one you would multiply each side by 16. To solve the second one you would multiply each side by 4. But 16 times 4 and 4 times 16 are both equal to 64.