

Answers to Course 1 Unit 4 Practice

LESSON 17-1

1. a. 3:7
b. 2:3
c. 3:4
d. 7:2
e. 1:2
2. B
3. No. The total number of tulips must be a multiple of 3 since the ratio given is part to whole.
4. The number of ducks decreased. The ratio of the number of ducks to geese last year was 2:3. This year it is 5:9. To compare the ratios, change 2:3 to 6:9. Since $6 > 5$, there were more ducks last year. The number of ducks decreased.
5. 57:95

LESSON 17-2

6. a.

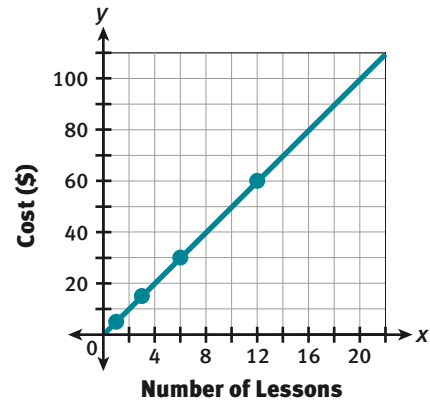
Number of Power Bars	4	12	36	72	108
Total Cost (\$15)	5	15	45	90	135

- b. $\frac{4}{5}, \frac{36}{45}, \frac{72}{90}, \frac{108}{135}$
- c. $\frac{4}{5}$
7. C

8. a.

Number of Lessons	1	3	6	12
Total Cost (\$)	5	15	30	60

b.



c. \$25

9. B

10. a.

Cups of seed	1	2	6	8	10
Cups of suet	3	6	18	24	30

- b. 8 cups
- c. 18 cups
- d. $\frac{6}{18}, \frac{8}{24}, \frac{10}{30}$

LESSON 18-1

11. a. $\frac{140}{1 \text{ sec}} = \frac{10}{1 \text{ sec}} \cdot s$

$$140 = 10s$$

$$14 = s$$

The film would play for 14 seconds.

b. $\frac{140}{1 \text{ sec}} \cdot 5$

$$= 700$$

The photographer will have 700 photos at the new speed.

12. C

13. B

14. 84 hours

15. a. 1 week = 7 days

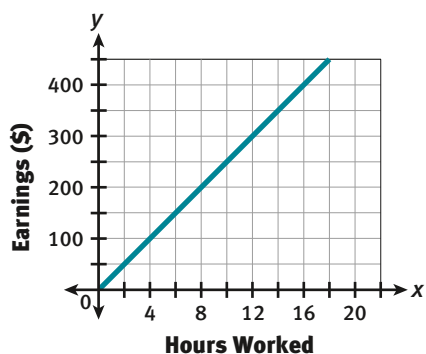
b. 105 days

LESSON 18-2

16. The new photo will be 6.75 inches by 9 inches.

17. a. \$375

b.



c. \$150

18. B

19. C

20. a. 27 inches by 36 inches

b. 972 square inches

LESSON 19-1

21. B

22. \$9

23. B

24. Kendal is incorrect. It is not a unit rate because the cost is not given per pencil.

25. $\frac{1}{4}$ cup

LESSON 19-2

26. a. \$2.55

b. \$0.42

27. C

28. 11.25 calories / ounce

29. A

30. a.

	# of batteries in the package	Total Price	Unit Price
Package A	4	\$2.68	\$0.67
Package B	10	\$4.20	\$0.42
Package C	24	\$8.64	\$0.36

b. Package C

LESSON 19-3

31. 0.2 km/min

32. A

33. a. $\frac{5 \text{ miles}}{20 \text{ miles}} = \frac{x \text{ miles}}{1 \text{ minute}}$

b. 0.25 miles per minute

34. D

35. a. $\frac{\text{car's miles}}{\text{car's hours}} = \frac{x}{1 \text{ hour}}$

b.

	Miles	Time	Miles per hour
Car A	434	7 hours	62 mph
Car B	374	5.5 hours	68 mph
Car C	585	9 hours	65 mph

c. Car B

LESSON 20-1

36. a. 40

b. 40 percent

c. 40%

37. B

38. a. 60%

b. 80%

c. 35%

d. 87.5%

39. C

40. $100 - (56 + 19) = 25$; 25%

LESSON 20-2

41. D

42. a. 2:5

b. $\frac{2}{5}$

c. 0.4

d. 40%

43. C

44. a. 65%

b. 49%

c. 20%

45.

Fraction	Decimal	Percent
$\frac{1}{2}$	0.5	50%
$\frac{4}{5}$	0.8	80%
$\frac{3}{10}$	0.3	30%
$\frac{2}{3}$	0.666	$66\frac{2}{3}\%$

LESSON 20-3

46. a. <

b. >

c. >

d. >

47. B

48. a. 1.25 out of 100

b. $\frac{1.25}{100} = \frac{x}{1500}$

$$100x = 1.25(1500)$$

$$100x = 1875$$

$$x = 18.75$$

About 19 candles per hour.

49. A

50. $33\frac{1}{3}\%$

LESSON 21-1

51. D

52. 20%

53. a. $\frac{x}{100} = \frac{180}{600}$

b. $\frac{x}{100} = \frac{180}{600}$
 $18000 = 600x$
 $30 = x$

c. 30%

54. B

55. 90%

LESSON 21-2

56. a. $\frac{7}{100} = \frac{x}{6000}$

b. $\frac{7}{100} = \frac{x}{6000}$

$$100x = 7 \cdot 6000$$

$$100x = \frac{42000}{100}$$

$$x = 420$$

c. \$420

57. B

58. a. \$67.50

b. \$382.50

59. A

60. Round 512 down to 500. Round 46% to 50%. One half of 600 is 300. About 300 students participated in a sport.

LESSON 21-3

61. B

62. a. $\frac{20}{100} = \frac{32}{x}$

b. $\frac{20}{100} = \frac{32}{x}$

$$20x = 3200$$

$$x = 160$$

63. C

64. a. $1.15x = 56$

b. \$48.70

65. \$1100