

Study Guide for Module 1 Lessons 1-15

Answer Key

- 1. a
- 2. d
- 3. b
- 4. c
- 5. d
- 6. b
- 7. b
- 8. d
- 9. d
- 10. a

LESSON 4-1

Practice and Problem Solving: A/B

- 1. 2 eggs per batch
- 2. 53 mph
- 3. \$8/h
- 4. 14 points per game
- 5. \$0.20/oz
- 6. $1\frac{3}{4}$ gal/h
- 7. $\frac{1}{2}$ ft/min
- 8. Food A: 200 cal/serving; Food B: 375 cal/serving; Food A has fewer calories per serving.

LESSON 4-2

Practice and Problem Solving: A/B

- 11. c
- 12. a
- 13. c
- 14. b
- 15. b

- 1. a. yes
b. Sample answer: $c = 27t$
c. t
d. c
- 2. a. yes
b. Sample answer: $c = 4.35w$
c. w
d. c
- 3. not proportional
- 4. yes; Sample answers: $d = 40t$;
 $d = \text{distance}; t = \text{time}$
- 5. $k = \frac{1}{3}$; Sample answers: $b = \frac{1}{3}p$;
 $b = \text{boxes}; p = \text{pens}$
- 6. $k = 6$; Sample answers: $m = 6p$;
 $m = \text{muffins}; p = \text{packs}$

7. a.

Days	1	2	3	4	5
Hours	24	48	72	96	120

- b. yes
- c. Sample answer: $h = 24d$ where d is the number of days and h is the number of hours

LESSON 4-3

Practice and Problem Solving: A/B

1.

Time (h)	2	4	5	9
Pay (\$)	16	32	40	72

Earnings are always 8 times the number of hours.

2.

Weight (lb)	2	3	6	8
Price (\$)	1.40	2.10	4.20	5.60

Cost is always 0.7 times the number of pounds.

- 3. Not proportional; The line will not pass through the origin.
- 4. Proportional; The line will pass through the origin.
- 5. The car uses 2 gal of fuel to travel 40 mi.
- 6. $y = 20x$, where x is the gallons of fuel used, y is the distance traveled (in miles), and k is the constant of proportionality
- 7. The graph for the compact car would be steeper.