

LESSON
4-1

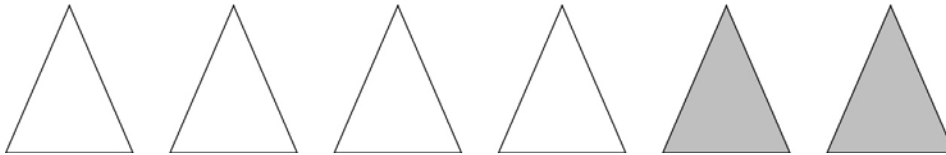
Ratios, Rates, and Proportional Reasoning

Practice A: Ratios and Rates

Use the table to write each ratio.

- angel fish to tiger barbs _____
- red-tail sharks to clown loaches _____
- catfish to angel fish _____
- clown loaches to tiger barbs _____
- catfish to red-tail sharks _____
- Write three equivalent ratios to compare the number of gray triangles in the picture with the total number of triangles.

Caroline's Pet Fish	
Tiger Barbs	5
Catfish	1
Angel fish	4
Red-tail sharks	1
Clown loaches	3



Use the table to write each ratio.

- gray male kittens to gray female kittens

- white female kittens to white male kittens

- A candy store sells 2 ounces of chocolate for \$0.80 and 3 ounces of chocolate for \$0.90. How much does the store charge per ounce for the 2 ounces of chocolate? How much does the store charge per ounce for the 3 ounces of chocolate? Which is the better deal?

Caroline's Kittens		
	White	Gray
Male	3	2
Female	5	5

UNIT 2 Rate, Ratio, and Proportional Reasoning Using Equivalent Fractions

Module 4

Answers for Lesson 4-1

Practice A

- 4:5
- 1:3
- 1:4
- 3:5
- 1:1
- Possible answer: 2:6, 1:3, 4:12
- 2:5
- 5:3
- \$0.40; \$0.30; the 3 ounces of chocolate

Practice B

- 9:12 or 3:4
- 8:16 or 1:2
- 9:10
- 10:12 or 5:6
- 12:9 or 4:3
- Possible answer: 6:9, 2:3, 12:18
- $\frac{12}{14}$ or $\frac{6}{7}$
- $\frac{15}{9}$ or $\frac{5}{3}$
- $\frac{14}{15}$
- $\frac{9}{12}$ or $\frac{3}{4}$
- the 8-ounce bag
- Henry

Practice C

- 66:36 or 11:6
- 51:96 or 17:32
- 78:75 or 26:25
- 24:189 or 8:63
- $\frac{7}{21}$; 7 to 21
- 12:50; 12 to 50
- $\frac{18}{10}$; 18:10
- $\frac{1}{2}$; $\frac{2}{4}$; $\frac{3}{6}$
- $\frac{10}{6}$; $\frac{15}{9}$; $\frac{20}{12}$
- $\frac{10}{12}$; $\frac{5}{6}$; $\frac{15}{18}$
- The 16-ounce bag; I would save \$0.02 per ounce.
- There are 8 juniors and 16 seniors on the team.

Review for Mastery

- 31 to 365
- 3 to 4

Possible answers are given.

- 2:3, 4:6, 6:9
- 4:5, 8:10, 12:15
- 10:12, 15:18, 20:24
- 5:7, 15:21, 20:28
- $\frac{20 \text{ books}}{\text{shelf}}$
- $\frac{6 \text{ students}}{\text{group}}$
- $\frac{60 \text{ seconds}}{\text{min}}$
- $\frac{27 \text{ miles}}{\text{gallon}}$
- $\frac{0.2 \text{ miles}}{\text{min}}$
- $\frac{\$0.43}{\text{pound}}$
- $\frac{24 \text{ hours}}{\text{day}}$
- $\frac{7 \text{ trading cards}}{\text{pack}}$

Challenge

Answers will vary.

Problem Solving

- 79:47
- 118:78 or 59:39
- Possible answer: 10:50 and 1:5
- Possible answer: 26:30 and 13:15
- A
- H
- B
- H

Reading Strategies

- $\frac{3}{4}$; 3 to 4; 3:4
- eight miles in two hours
- $\frac{8}{2}$, 8 to 2, 8:2
- both compare two quantities