

**0515 Grade 6 Math Roy  
(Self-Study/ Homework)**

**Answer Key to Exercises**

Go Math!

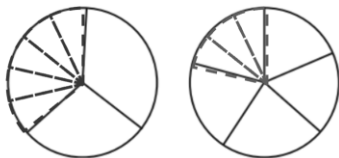
**Lesson 6.4**

Page 371

- |                    |                   |
|--------------------|-------------------|
| 5.) $25/45, 12/45$ | 9.) 40            |
| 6.) $7/42, 8/42$   | 10.) 3 or 15      |
| 7.) $15/42, 8/42$  | 11.) 7, 21, or 42 |
| 8.) $21/36, 10/36$ | 14.) 60           |

Page 372

- 15.)
- a.) I am given how many slices are already cut into each pie.
- b.) I am asked how many slices the pie will be cut into so they both have the same number of slices.
- c.) No. One pie is cut into thirds and other one into fifths so she has to cut the first pie more times than the second.



- d.)
- e.) 15  
fifths  
thirds  
 $1/15$
- 16.) A and D

Page 373

- |        |               |        |              |
|--------|---------------|--------|--------------|
| 1.) 10 | $2/10, 5/10$  | 4.) 15 | $9/15, 5/15$ |
| 2.) 12 | $3/12, 8/12$  | 5.) 8  | $4/8, 3/8$   |
| 3.) 18 | $15/18, 6/18$ | 6.) 12 | $2/12, 3/12$ |

7.)  $15/18, 4/18$

10.) 6

8.)  $2/24, 9/24$

11.) Possible answer:  $6/8$  and

9.)  $25/45, 6/45$

$4/8$

12.) First, I will identify the least common denominator. Using the multiples of the denominators, I know it's 12. Next, I need to get the equivalent fraction of each fraction. I have to multiply the denominator to a factor so that the product is equal to the least common denominator, then I will use the same factor with the numerator as well. The equivalent fractions will be  $2/12$  and  $3/12$ .

Page 374

1.)  $27/30$  and  $25/30$

4.) 63 bottle caps

2.) Possible Answer:  $15/24$  and  $8/24$

5.) 1.134

3.) >

6.) 13

**Lesson 6.5**

Page 375

Unlock the Problem

**One Way**

Find a common denominator by multiplying the denominators.

$4 \times 8 = \underline{32}$  ← common denominator

Use the common denominator to write equivalent fractions with like denominators. Then add, and write your answer in simplest form.

$$\begin{array}{r} \frac{1}{4} = \frac{1 \times \underline{8}}{4 \times \underline{8}} = \frac{\underline{8}}{\underline{32}} \\ + \frac{\underline{3}}{\underline{8}} = + \frac{\underline{3} \times \underline{4}}{\underline{8} \times \underline{4}} = + \frac{\underline{12}}{\underline{32}} \\ \hline \frac{\underline{20}}{\underline{32}} = \frac{\underline{5}}{\underline{8}} \end{array}$$

So, Malia bought  $\frac{5}{8}$  pound of beads.

**Another Way**

Find the least common denominator.

The least common denominator

of  $\frac{1}{4}$  and  $\frac{3}{8}$  is 8.

$$\begin{array}{r} \frac{1}{4} = \frac{1 \times \underline{2}}{4 \times \underline{2}} = \frac{\underline{2}}{\underline{8}} \\ + \frac{\underline{3}}{\underline{8}} \\ \hline \frac{\underline{5}}{\underline{8}} \end{array}$$

1. I can estimate the sum.  $0 + \frac{1}{2} = \frac{1}{2}$ . Since  $\frac{5}{8}$  is close to the estimate,  $\frac{1}{2}$ , the answer is reasonable.

Page 376

Subtract.  $\frac{9}{10} - \frac{2}{5}$  Write your answer in simplest form.

$$\begin{array}{r} \frac{9}{10} = \frac{9}{10} \\ - \frac{2}{5} = -\frac{2 \times 2}{5 \times 2} = -\frac{4}{10} \\ \hline \frac{5}{10} = \frac{1}{2} \end{array}$$

Describe the steps you took to solve the problem.

First, I found a common denominator and used it to write equivalent fractions with like denominators. Then I subtracted the fractions and simplified.

2. I can estimate the difference.  $1 - \frac{1}{2} = \frac{1}{2}$ . Since the difference is equal to the estimate,  $\frac{1}{2}$ , the answer is reasonable.

Share and Show

- |                     |                     |
|---------------------|---------------------|
| 1.) $\frac{3}{4}$   | 4.) $\frac{5}{8}$   |
| 2.) $\frac{29}{35}$ | 5.) $\frac{3}{28}$  |
| 3.) $\frac{11}{12}$ | 6.) $\frac{13}{20}$ |

Page 377

- |                      |   |
|----------------------|---|
| 7.) $\frac{5}{9}$    | 14.) $\frac{9}{20}$   |
| 8.) $\frac{14}{15}$  | 15.) $\frac{7}{10}$   |
| 9.) $\frac{7}{15}$   | 16.) $\frac{1}{12}$   |
| 10.) $\frac{17}{18}$ | 17.) $\frac{11}{15}$  |
| 11.) $\frac{1}{8}$   | 18.) $\frac{27}{45}$ , or $\frac{9}{15}$ , or $\frac{3}{5}$ |
| 12.) $\frac{1}{21}$  | 19.) $\frac{1}{8}$ cup                                      |
| 13.) $\frac{5}{18}$  |   |

Page 378

- 20.)  $\frac{7}{12}$
- 21.) Jamie's claim is reasonable. I know Jamie's claim is reasonable

because I can estimate  $4/5 - 1/2$  as  $1 - 1/2 = 1/2$  and since  $3/10$  is close to the estimate, the answer is reasonable.

22.)

$$\frac{7}{9} = \frac{7 \times 1}{9 \times 1} = \frac{7}{9}$$

$$\frac{1}{3} = \frac{1 \times 3}{3 \times 3} = \frac{3}{9}$$

$1 \frac{1}{9}$  yards. To find the total amount of wire used, I added  $7/9$  and  $3/9$ . The sum is  $10/9$ . Then I rewrote the sum to the mixed number  $1 \frac{1}{9}$ .

#### Page 379

1.)  $5/14$

7.)  $13/28$

2.)  $1/5$

8.)  $1 \frac{5}{24}$

3.)  $2/3$

9.)  $1 \frac{7}{30}$

4.)  $1 \frac{1}{40}$

10.)  $1 \frac{31}{40}$  cups

5.)  $17/30$

11.)  $13/20$  pound

6.)  $7/20$

12.) In  $\frac{1}{2} + \frac{1}{4}$ , the least common denominator is already the denominator of one of the addends, while with  $\frac{1}{2} + \frac{1}{3}$ , both addends have to be rewritten to equivalent fractions.

#### Page 380

1.)  $19/24$  pound

4.) \$19

2.)  $5/8$  foot

5.) Possible estimate: \$1.50

3.) 9 yards

6.)  $14 \frac{2}{3}$  ounces

7.) \$90

### Mid-Chapter Checkpoint Answer Key

- |  |                             |             |
|--|-----------------------------|-------------|
| 1.) common multiple                      | 10.) 24                     | 20/24, 9/24 |
| 2.) common denominator                   | 11.) 21                     | 7/21, 6/21  |
| 3.) $1\frac{1}{2}$                       | 12.) $\frac{4}{9}$          |             |
| 4.) 3                                    | 13.) $\frac{24}{35}$        |             |
| 5.) 4                                    | 14.) $\frac{9}{20}$         |             |
| 6.) 54 $\frac{9}{54}$ , $\frac{6}{54}$   | 15.) $\frac{1}{4}$          |             |
| 7.) 40 $\frac{15}{40}$ , $\frac{12}{40}$ | 16.) $\frac{1}{8}$          |             |
| 8.) 36 $\frac{4}{36}$ , $\frac{15}{36}$  | 17.) $\frac{19}{24}$ gallon |             |
| 9.) 10 $\frac{4}{10}$ , $\frac{1}{10}$   |                             |             |

### Homework

#### Study for an online mid-chapter test.

(available from May 16 to 26).

- Coverage: Lessons 6.1 to 6.5
- Try to answer first the online review exercises for lessons 6.1 to 6.5 before you answer the mid-chapter test.

#### Completed by May 22<sup>nd</sup>

Go Math!

- p. 385, numbers 8 to 21.
- p. 387, numbers 1 to 8.
- p. 388, numbers 1 to 6.

#### Completed by May 25<sup>th</sup>

Go Math!

- p. 391, numbers 3 to 13.
- p. 393, numbers 1 to 6.
- p. 394, numbers 1 to 6.