

Chapter 6 Review/Test



Personal Math Trainer

Online Assessment and Intervention

1. Sophia babysat for $3\frac{7}{12}$ hours on Friday. She babysat for $2\frac{5}{6}$ hours on Saturday. For 1a–1c, estimate how long Sophia babysat on Friday and Saturday combined. Choose the correct benchmarks and sum.

1a. Sophia babysat for about
 2
 3
 $3\frac{1}{2}$
 4
 hours on Friday.

1b. Sophia babysat for about
 1
 2
 $2\frac{1}{2}$
 3
 hours on Saturday.

1c. Sophia babysat for about
 5
 $5\frac{1}{2}$
 6
 $6\frac{1}{2}$
 hours on Friday and Saturday combined.

2. Rodrigo practiced playing the guitar $15\frac{1}{3}$ hours over the past 3 weeks. He practiced for $6\frac{1}{4}$ hours during the first week and $4\frac{2}{3}$ hours during the second week. How much time did Rodrigo spend practicing during the third week? Use the numbers and symbols to write an equation that represents the problem. Then solve the equation. Symbols may be used more than once or not at all.

$15\frac{1}{3}$
 $6\frac{1}{4}$
 $4\frac{2}{3}$
 x
 $=$
 $+$

Practice time during third week: _____ hours

3. Liam bought $5\frac{7}{8}$ pounds of steak. He used $2\frac{1}{16}$ pounds of the steak for a cookout. For 3a–3c, fill in each blank.

3a. Rounded to the closest benchmark, Liam bought about pounds of steak.

3b. Rounded to the closest benchmark, Liam used about pounds of steak for the cookout.

3c. Liam has about pounds of steak remaining after the cookout.

4. Jackson picked apples for his family. He picked a total of $6\frac{1}{2}$ pounds. He took $2\frac{3}{4}$ pounds to his aunt and $1\frac{5}{8}$ pounds to his mother. How many pounds of apples were left to give to his grandmother? Use the numbers and symbols to write an equation that represents the problem, then solve the equation. Symbols may be used more than once or not at all.

$6\frac{1}{2}$ $2\frac{3}{4}$ $1\frac{5}{8}$ \times $=$ $+$

Weight of apples Jackson gave to his grandmother: _____ pounds

5. Write $\frac{2}{5}$ and $\frac{1}{3}$ as equivalent fractions using a common denominator.

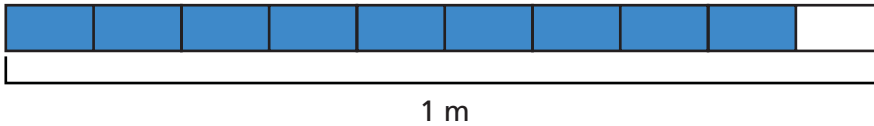
and

6. Jill brought $2\frac{1}{3}$ boxes of carrot muffins for a bake sale. Mike brought $1\frac{3}{4}$ boxes of apple muffins. What is the total number of boxes of muffins Jill and Mike brought to the bake sale?

_____ boxes of muffins

Name _____

7. The shaded part of the diagram shows what Genie has left from a meter of string. She will use $\frac{3}{5}$ meter of string to make bracelets. She wants to determine how much of the string she will have remaining after making the bracelets. For 7a–7c, select True or False for each statement.



- 7a. To determine how much string will be left after making the bracelets, Rebecca must find $\frac{9}{10} - \frac{3}{5}$. True False
- 7b. The fractions $\frac{3}{5}$ and $\frac{6}{10}$ are equivalent. True False
- 7c. Rebecca will have $\frac{1}{5}$ meter of string left. True False
8. For 8a–8c, tell whether the Commutative Property or the Associative Property can be used to show each equation is true without calculating. Choose the correct property of addition.

8a. $\frac{1}{6} + \left(\frac{7}{8} + \frac{5}{6}\right) = \frac{1}{6} + \left(\frac{5}{6} + \frac{7}{8}\right)$

Associative Property

Commutative Property

8b. $\left(\frac{7}{10} + \frac{1}{3}\right) + \frac{1}{10} = \left(\frac{1}{3} + \frac{7}{10}\right) + \frac{1}{10}$

Associative Property

Commutative Property

8c. $\left(6\frac{2}{5} + \frac{4}{9}\right) + 3\frac{2}{9} = 6\frac{2}{5} + \left(\frac{4}{9} + 3\frac{2}{9}\right)$

Associative Property

Commutative Property

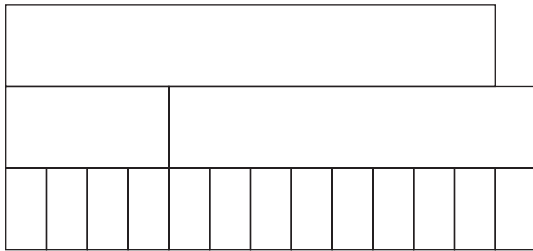
9. Joshua uses a rule to write the following sequence of numbers.

$$\frac{1}{6}, \frac{1}{2}, \frac{5}{6}, \text{_____}, 1\frac{1}{2}$$

What rule did Joshua use?

What is the missing number in the sequence?

10. Jeffrey walked $\frac{1}{3}$ mile on Monday and jogged $\frac{3}{4}$ mile on Tuesday. How far did he walk and jog on Monday and Tuesday combined? Use the tiles to complete the fraction strip model to show how you found your answer. The fractions may be used more than once or not at all.



_____ mile(s)

Personal Math Trainer



11. **THINK SMARTER +** Mr. Cohen drives $84\frac{2}{10}$ miles on Tuesday, $84\frac{6}{10}$ miles on Wednesday, and 85 miles on Thursday.

Part A

What is the rule for the distance Mr. Cohen drives each day? Show how you can check your answer.

Part B

If the pattern continues, how many miles will Mr. Cohen drive on Sunday? Explain how you found your answer.

Name _____

12. Alana bought $\frac{3}{8}$ pound of Swiss cheese and $\frac{1}{4}$ pound of American cheese. Which pairs of fractions are equivalent to the amounts Alana bought? Mark all that apply.

A $\frac{24}{64}$ and $\frac{8}{64}$

C $\frac{12}{32}$ and $\frac{6}{32}$

B $\frac{6}{16}$ and $\frac{4}{16}$

D $\frac{15}{40}$ and $\frac{10}{40}$

13. **GO DEEPER** Four students spent time volunteering last weekend. The table shows how much time each student spent volunteering.

Volunteering	
Student	Time (in hours)
Amy	$4\frac{5}{6}$
Beth	$6\frac{1}{2}$
Victor	$5\frac{3}{4}$
Cal	$5\frac{2}{3}$

Match each pair of students with the difference between how much time they spent volunteering.

Amy and Victor •

• $\frac{3}{4}$ hour

Cal and Beth •

• $\frac{11}{12}$ hour

Beth and Victor •

• $\frac{5}{6}$ hour

14. For 14a–14d, tell which expressions require you to rename mixed numbers before you can subtract. Find each difference. Write each expression and the difference as an equation in the correct box.

14a. $2\frac{1}{3} - 1\frac{3}{4}$

14c. $5\frac{2}{3} - 2\frac{5}{8}$

14b. $1\frac{3}{4} - \frac{7}{8}$

14d. $6\frac{1}{5} - 2\frac{1}{3}$

Requires Renaming

Does Not Require Renaming

15. Mr. Clements painted his barn for $3\frac{3}{5}$ hours in the morning. He painted the barn for $5\frac{3}{4}$ hours in the afternoon. For 15a–15c, select True or False for each statement.

15a. A common denominator of the mixed numbers is 20. True False

15b. The amount of time spent painting in the morning can be rewritten as $3\frac{15}{20}$ hours. True False

15c. Mr. Clements spent $2\frac{3}{20}$ hours longer painting in the afternoon than the morning. True False

16. Tom exercised $\frac{4}{5}$ hour on Monday and $\frac{5}{6}$ hour on Tuesday.

Part A

Complete the calculations below to write equivalent fractions with a common denominator.

$$\frac{4}{5} = \frac{4 \times \boxed{}}{5 \times \boxed{}} = \frac{\boxed{}}{\boxed{}}$$

$$\frac{5}{6} = \frac{5 \times \boxed{}}{6 \times \boxed{}} = \frac{\boxed{}}{\boxed{}}$$

Part B

How much time did Tom spend exercising on Monday and Tuesday combined? Explain how you found your answer.

Part C

How much longer did Tom spend exercising on Tuesday than he spent on Monday? Explain how you found your answer.