

Monday, February 24, 2020

Name: _____ Section: _____

5th Grade American Math Homework

Chapter 6 (Part 2)

Dear Family,

Throughout the next few weeks, our math class will study the operations of addition and subtraction with fractions. The students will learn to identify and apply Least Common Denominators. You can expect to see homework that includes adding and subtracting mixed numbers.

	To be completed on:	✓
Lesson 6.7	Monday 2/24	
Lesson 6.8 (short quiz in class)	Tuesday 2/25	
Lesson 6.9	Wednesday 2/26	
Lesson 6.10	Thursday 2/27	
Extra Practice	Friday 2/28	
***Chapter Test next Tuesday 3/3		
*** IReady 2 lessons per week all scholars		

Vocabulary

common denominator A common multiple of two or more denominators

equivalent fraction Fraction that name the same amount or part

Least Common Multiple (LCM) or **Least Common Denominator**

The least number that is common multiple of two or more numbers / denominators.

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Name _____

Subtraction with Renaming

Estimate. Then find the difference and write it in simplest form.

1. Estimate: _____

$$6\frac{1}{3} - 1\frac{2}{5}$$

$$\begin{array}{r} 6\frac{1}{3} \rightarrow 5\frac{20}{15} \\ -1\frac{2}{5} \rightarrow -1\frac{6}{15} \\ \hline 4\frac{14}{15} \end{array}$$

2. Estimate: _____

$$4\frac{1}{2} - 3\frac{5}{6}$$

3. Estimate: _____

$$9 - 3\frac{7}{8}$$

4. Estimate: _____

$$2\frac{1}{6} - 1\frac{2}{7}$$

5. Estimate: _____

$$8 - 6\frac{1}{9}$$

6. Estimate: _____

$$9\frac{1}{4} - 3\frac{2}{3}$$

7. Estimate: _____

$$2\frac{1}{8} - 1\frac{2}{7}$$

8. Estimate: _____

$$8\frac{1}{5} - 3\frac{5}{9}$$

9. Estimate: _____

$$10\frac{2}{3} - 5\frac{9}{10}$$

Problem Solving



10. Carlene bought $8\frac{1}{16}$ yards of ribbon to decorate a shirt. She only used $5\frac{1}{2}$ yards. How much ribbon does she have left over?

11. During his first vet visit, Pedro's puppy weighed $6\frac{1}{8}$ pounds. On his second visit, he weighed $9\frac{1}{16}$ pounds. How much weight did he gain between visits?

Lesson Check

1. Natalia picked $7\frac{1}{6}$ bushels of apples today and $4\frac{5}{8}$ bushels yesterday. How many more bushels did she pick today?
(A) $3\frac{4}{24}$ bushels (C) $2\frac{4}{8}$ bushels
(B) $2\frac{13}{24}$ bushels (D) $1\frac{6}{12}$ bushels
2. Max needs $10\frac{1}{4}$ cups flour to make a batch of pizza dough for the pizzeria. He only has $4\frac{1}{2}$ cups flour. How much more flour does he need to make the dough?
(A) $6\frac{1}{4}$ cups (C) $5\frac{1}{2}$ cups
(B) $5\frac{3}{4}$ cups (D) $5\frac{1}{4}$ cups

Spiral Review

3. The accountant charged \$35 for the first hour of work and \$23 for each hour after that. He earned a total of \$127. How many hours did he work? (Lesson 1.9)
(A) 2 hours
(B) 3 hours
(C) 4 hours
(D) 5 hours
4. The soccer league needs to transport all 133 players to the tournament. If 4 players can ride in one car, how many cars are needed? (Lesson 2.2)
(A) 25
(B) 30
(C) 33
(D) 34
5. Which number shows five hundred million, one hundred fifteen in standard form? (Lesson 1.2)
(A) 5,115,000
(B) 5,000,115
(C) 500,115,000
(D) 500,000,115
6. Find the quotient. (Lesson 5.6)
 $6.39 \div 0.3$
(A) 0.213
(B) 2.13
(C) 21.3
(D) 213.0

Name _____

Patterns with Fractions

Write a rule for the sequence. Then, find the unknown term.

1. $\frac{1}{2}, \frac{2}{3}, \frac{5}{6}, 1, 1\frac{1}{6}$

2. $1\frac{3}{8}, 1\frac{3}{4}, 2\frac{1}{8}, \underline{\hspace{1cm}}, 2\frac{7}{8}$

Think: The pattern is increasing.
Add $\frac{1}{6}$ to find the next term.

Rule: _____

Rule: _____

3. $1\frac{9}{10}, 1\frac{7}{10}, \underline{\hspace{1cm}}, 1\frac{3}{10}, 1\frac{1}{10}$

4. $2\frac{5}{12}, 2\frac{1}{6}, 1\frac{11}{12}, \underline{\hspace{1cm}}, 1\frac{5}{12}$

Rule: _____

Rule: _____

Write the first four terms of the sequence.

5. **Rule:** start at $\frac{1}{2}$, add $\frac{1}{3}$

6. **Rule:** start at $3\frac{1}{8}$, subtract $\frac{3}{4}$

7. **Rule:** start at $5\frac{1}{2}$, add $1\frac{1}{5}$

8. **Rule:** start at $6\frac{2}{3}$, subtract $1\frac{1}{4}$

Problem Solving



9. Jarett's puppy weighed $3\frac{3}{4}$ ounces at birth. At one week old, the puppy weighed $5\frac{1}{8}$ ounces. At two weeks old, the puppy weighed $6\frac{1}{2}$ ounces. If the weight gain continues in this pattern, how much will the puppy weigh at three weeks old?

10. A baker started out with 12 cups of flour. She had $9\frac{1}{4}$ cups of flour left after the first batch of batter she made. She had $6\frac{1}{2}$ cups of flour left after the second batch of batter she made. If she makes two more batches of batter, how many cups of flour will be left?

Lesson Check

1. What is a rule for the sequence?

$\frac{5}{6}, 1\frac{1}{2}, 2\frac{1}{6}, 2\frac{5}{6}, \dots$

- (A) add $1\frac{1}{4}$
- (B) add $\frac{2}{3}$
- (C) subtract $1\frac{1}{4}$
- (D) subtract $\frac{2}{3}$

2. Jaime biked $5\frac{1}{4}$ miles on Monday, $6\frac{7}{8}$ miles on Tuesday, and $8\frac{1}{2}$ miles on Wednesday. If he continues the pattern, how many miles will he bike on Friday?

- (A) $10\frac{1}{8}$ miles
- (B) $10\frac{3}{4}$ miles
- (C) $11\frac{1}{8}$ miles
- (D) $11\frac{3}{4}$ miles

Spiral Review

3. Jaylyn rode her bicycle in a bike-a-thon. She rode 33.48 miles in 2.7 hours. If she rode at the same speed, what was her speed in miles per hour? (Lesson 5.6)

- (A) 12.04
- (B) 12.08
- (C) 12.4
- (D) 12.8

4. One week a company filled 546 boxes with widgets. Each box held 38 widgets. How many widgets did the company pack in boxes that week? (Lesson 1.7)

- (A) 20,748
- (B) 20,608
- (C) 6,006
- (D) 2,748

5. Which expression represents the statement "Add 9 and 3, then multiply by 6"? (Lesson 1.10)

- (A) $9 + 3 \times 6$
- (B) $6 \times (9 + 3)$
- (C) $6 \times 9 + 3$
- (D) $6 \times 9 \times 3$

6. Mason took 9.4 minutes to complete the first challenge in the Champs Challenge. He completed the second challenge 2.65 minutes faster than the first challenge. How long did it take Mason to complete the second challenge? (Lesson 3.9)

- (A) 7.39 minutes
- (B) 7.35 minutes
- (C) 6.85 minutes
- (D) 6.75 minutes

Name _____

Problem Solving • Practice Addition and Subtraction

Read each problem and solve.

1. From a board 8 feet in length, Emmet cut two $2\frac{1}{3}$ -foot bookshelves. How much of the board remained?

 Write an equation: $8 = 2\frac{1}{3} + 2\frac{1}{3} + x$

Rewrite the equation to work backward:

$$8 - 2\frac{1}{3} - 2\frac{1}{3} = x$$

 Subtract twice to find the length remaining: $3\frac{1}{3}$ feet

2. Lynne bought a bag of grapefruit, $1\frac{5}{8}$ pounds of apples, and $2\frac{3}{16}$ pounds of bananas. The total weight of her purchases was $7\frac{1}{2}$ pounds. How much did the bag of grapefruit weigh?

3. Mattie's house consists of two stories and an attic. The first floor is $8\frac{5}{6}$ feet tall, the second floor is $8\frac{1}{2}$ feet tall, and the entire house is $24\frac{1}{3}$ feet tall. How tall is the attic?

4. It is $10\frac{3}{5}$ miles from Alston to Barton and $12\frac{1}{2}$ miles from Barton to Chester. The distance from Alston to Durbin, via Barton and Chester, is 35 miles. How far is it from Chester to Durbin?

5. Marcie bought a 50-foot roll of packing tape. She used two $8\frac{5}{6}$ -foot lengths. How much tape is left on the roll?

6. Meg started her trip with $11\frac{1}{2}$ gallons of gas in her car's gas tank. She bought an additional $6\frac{4}{5}$ gallons on her trip and arrived back home with $3\frac{3}{10}$ gallons left. How much gas did she use on the trip?

Lesson Check

1. Paula spent $\frac{3}{8}$ of her allowance on clothes and $\frac{1}{6}$ on entertainment. What fraction of her allowance did she spend on other items?
(A) $\frac{3}{8}$
(B) $\frac{11}{24}$
(C) $\frac{13}{24}$
(D) $\frac{5}{8}$
2. Della bought a tree seedling that was $2\frac{1}{4}$ feet tall. During the first year, it grew $1\frac{1}{6}$ feet. After two years, it was 5 feet tall. How much did the seedling grow during the second year?
(A) $1\frac{1}{4}$ feet
(B) $1\frac{1}{3}$ feet
(C) $1\frac{5}{12}$ feet
(D) $1\frac{7}{12}$ feet

Spiral Review

3. Which is another way to write 100,000?
(Lesson 1.4)
(A) 10^6
(B) 10^5
(C) 10×10^5
(D) 10×10^6
4. Which expression is the best choice for estimating $868 \div 28$? (Lesson 2.5)
(A) $868 \div 28$
(B) $900 \div 30$
(C) $1,000 \div 20$
(D) $1,000 \div 30$
5. Justin gave the clerk \$20 to pay a bill of \$6.57. How much change should Justin get?
(Lesson 3.11)
(A) \$12.43
(B) \$12.53
(C) \$13.43
(D) \$14.43
6. What is the value of the following expression?
 $7 + 18 \div (6 - 3)$ (Lesson 1.12)
(A) 9
(B) 13
(C) 21
(D) 27

Name _____

Use Properties of Addition

Use the properties and mental math to solve. Write your answer in simplest form.

$$\begin{aligned} 1. \quad & \left(2\frac{1}{3} + 1\frac{2}{5}\right) + 3\frac{2}{3} \\ &= \left(1\frac{2}{5} + 2\frac{1}{3}\right) + 3\frac{2}{3} \\ &= 1\frac{2}{5} + \left(2\frac{1}{3} + 3\frac{2}{3}\right) \\ &= 1\frac{2}{5} + 6 \\ &= 7\frac{2}{5} \end{aligned}$$

$$2. \quad 8\frac{1}{5} + \left(4\frac{2}{5} + 3\frac{3}{10}\right)$$

$$3. \quad \left(1\frac{3}{4} + 2\frac{3}{8}\right) + 5\frac{7}{8}$$

$$4. \quad 2\frac{1}{10} + \left(1\frac{2}{7} + 4\frac{9}{10}\right)$$

$$5. \quad \left(4\frac{3}{5} + 6\frac{1}{3}\right) + 2\frac{3}{5}$$

$$6. \quad 1\frac{1}{4} + \left(3\frac{2}{3} + 5\frac{3}{4}\right)$$

$$7. \quad \left(7\frac{1}{8} + 1\frac{2}{7}\right) + 4\frac{3}{7}$$

$$8. \quad 3\frac{1}{4} + \left(3\frac{1}{4} + 5\frac{1}{5}\right)$$

$$9. \quad 6\frac{2}{3} + \left(5\frac{7}{8} + 2\frac{1}{3}\right)$$

Problem Solving



10. Elizabeth rode her bike $6\frac{1}{2}$ miles from her house to the library and then another $2\frac{2}{5}$ miles to her friend Milo's house. If Carson's house is $2\frac{1}{2}$ miles beyond Milo's house, how far would she travel from her house to Carson's house?
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11. Hassan made a vegetable salad with $2\frac{3}{8}$ pounds of tomatoes, $1\frac{1}{4}$ pounds of asparagus, and $2\frac{7}{8}$ pounds of potatoes. How many pounds of vegetables did he use altogether?
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Lesson Check

- What is the sum of $2\frac{1}{3}$, $3\frac{5}{6}$, and $6\frac{2}{3}$?
(A) $12\frac{5}{6}$
(B) $11\frac{5}{6}$
(C) $11\frac{8}{12}$
(D) $11\frac{10}{18}$
- Letitia has $7\frac{1}{6}$ yards of yellow ribbon, $5\frac{1}{4}$ yards of orange ribbon, and $5\frac{1}{6}$ yards of brown ribbon. How much ribbon does she have altogether?
(A) $18\frac{7}{12}$ yards
(B) $18\frac{1}{6}$ yards
(C) $17\frac{7}{12}$ yards
(D) $17\frac{3}{16}$ yards

Spiral Review

- Juanita wrote 3×47 as $3 \times 40 + 3 \times 7$. Which property did she use to rewrite the expression? (Lesson 1.3)
(A) Associative Property of Multiplication
(B) Commutative Property of Multiplication
(C) Distributive Property
(D) Identity Property
- What is the value of the expression $18 - 2 \times (4 + 3)$. (Lesson 1.11)
(A) 4
(B) 7
(C) 13
(D) 112
- Evan spent \$15.89 on 7 pounds of birdseed. How much did the birdseed cost per pound? (Lesson 5.4)
(A) \$2.07
(B) \$2.12
(C) \$2.27
(D) \$2.29
- Cade rode $1\frac{3}{5}$ miles on Saturday and $1\frac{3}{4}$ miles on Sunday. How far did he ride in all on the two days? (Lesson 6.6)
(A) $2\frac{7}{20}$ miles
(B) $2\frac{9}{20}$ miles
(C) $3\frac{3}{10}$ miles
(D) $3\frac{7}{20}$ miles

Name _____

Chapter 6 Extra Practice

Lessons 6.1 - 6.2

Use fraction strips to find the sum or difference. Write your answer in simplest form.

1. $\frac{5}{8} + \frac{1}{4}$

2. $\frac{7}{10} - \frac{3}{5}$

3. $\frac{1}{9} + \frac{5}{6}$

4. $\frac{3}{4} - \frac{5}{8}$

Lesson 6.3

Estimate the sum or difference.

1. $\frac{6}{10} + \frac{7}{12}$

2. $\frac{5}{12} + \frac{7}{8}$

3. $1\frac{3}{8} - \frac{8}{9}$

Lesson 6.4

Use a common denominator to write an equivalent fraction for each fraction.

1. $\frac{1}{2}, \frac{1}{3}$

Common denominator: _____

2. $\frac{7}{8}, \frac{3}{10}$

Common denominator: _____

3. $\frac{2}{3}, \frac{3}{4}$

Common denominator: _____

Use the least common denominator to write an equivalent fraction for each fraction.

4. $\frac{1}{4}, \frac{5}{6}$

5. $\frac{1}{2}, \frac{1}{8}$

6. $\frac{3}{5}, \frac{2}{7}$

Lessons 6.5 - 6.7

Find the sum or difference. Write your answer in simplest form.

1. $\frac{7}{8} - \frac{5}{6}$

2. $5 - 2\frac{4}{5}$

3. $3\frac{1}{4} + 1\frac{7}{8}$

4. $6\frac{9}{10} - 5\frac{4}{5}$

5. $\frac{1}{3} + \frac{4}{15}$

6. $1\frac{1}{3} + \frac{2}{5}$

7. $2\frac{3}{8} + 8\frac{5}{6}$

8. $9\frac{1}{4} - 2\frac{5}{8}$

Lesson 6.8

- On the first day of the play, the auditorium was $\frac{1}{3}$ full, the second day it was $\frac{5}{12}$ full, and on the third day it was $\frac{1}{2}$ full. If this pattern continues, how full will it be on the fourth day?
- Jake set up a study schedule. The plan called for him to study $\frac{1}{4}$ hour, $\frac{5}{8}$ hour, and 1 hour on Monday, Tuesday, and Wednesday in that order. If he continues with this pattern, how long will he study on Friday?

Lesson 6.9

- Sierra spent $\frac{2}{3}$ of her earnings on clothes and $\frac{1}{5}$ on school supplies. She saved the rest. What fraction of her earnings did she save?
- Noah made $1\frac{1}{2}$ dozen blueberry muffins and $1\frac{3}{4}$ dozen lemon muffins. He needs to take 5 dozen muffins to the bake sale. How many dozen more muffins does he need to bake?

Lesson 6.10

Use the properties and mental math to solve. Write your answer in simplest form.

1. $\left(\frac{4}{5} + \frac{2}{3}\right) + \frac{1}{5}$

2. $1\frac{1}{4} + \left(\frac{3}{4} + \frac{2}{7}\right)$

3. $\left(\frac{1}{6} + \frac{4}{5}\right) + \frac{5}{6}$