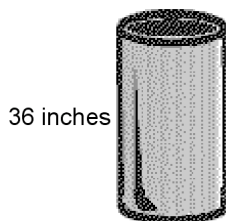


5th Grade Chapter 8 – Fraction Operations**Multiple Choice**

Identify the letter of the choice that best completes the statement or answers the question.

1. The container is $\frac{1}{6}$ full of recycled aluminum cans. How many inches high are the cans in the container?



- A. 6 inches B. 7 inches C. $36\frac{1}{6}$ inches D. 216 inches
2. Catalin left home and walked $\frac{4}{5}$ mile to her friend's house. When she arrived, she realized that she had dropped her hat along the way and had to walk back $\frac{1}{5}$ mile before she found it. When she found her hat, how far was she from her home?
- A. $\frac{3}{5}$ mile C. $\frac{3}{10}$ mile
B. 1 mile D. $\frac{5}{10}$ mile
3. Two friends ate $\frac{1}{2}$ of a chicken pot pie for lunch. For dinner that night they ate $\frac{1}{4}$ of the pie. What fractional part of the pie did they eat in all?
- A. $\frac{1}{4}$ C. $\frac{3}{4}$
B. $\frac{2}{6}$ D. $\frac{1}{6}$

7. Which of the following is equivalent to $6\frac{1}{5}$?

A. $7\frac{6}{5}$

C. $5\frac{6}{5}$

B. $4\frac{5}{5}$

D. $5\frac{5}{5}$

8. How long does it take to drive from Minneapolis to Chicago through Green Bay?

Route	Hours to Travel by Car
Minneapolis to Green Bay	$5\frac{11}{12}$
Green Bay to Chicago	$3\frac{2}{3}$

A. $9\frac{5}{12}$ hours

C. $9\frac{1}{12}$ hours

B. $8\frac{7}{12}$ hours

D. $9\frac{7}{12}$ hours

9. Chao collects sap from his maple trees each year to make into syrup. Last year he collected $3\frac{7}{8}$ gallons,

but this year the trees gave $5\frac{2}{5}$ gallons. How much more sap did he get this year?

A. $1\frac{1}{8}$ gallons

C. $1\frac{7}{8}$ gallons

B. $1\frac{21}{40}$ gallons

D. $1\frac{33}{40}$ gallons

10. Mr. O'Connor left 2 chicken pot pies in the freezer for his wife to eat while he was gone on a trip. If she eats $\frac{2}{5}$ of a pie each evening for dinner, how many days will the pies last?

A. 3 days

C. 5 days

B. 4 days

D. 6 days

Short Answer

11. While baking, Pedro used these amounts of flour.


 $\frac{1}{4}$ cup

 $\frac{2}{4}$ cup

How much flour did Pedro use altogether?

12. Larry sprinted $\frac{1}{6}$ mile, jogged $\frac{2}{6}$ mile, and then sprinted another $\frac{2}{6}$. What was his total distance?

13. Matt has $\frac{2}{5}$ of a box of crayons. Liz gives him an additional $\frac{1}{10}$ of a box. What fractional part of the box of crayons does Matt have now?

$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{10}$
---------------	---------------	----------------

$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$
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14. Marc played soccer for $\frac{2}{3}$ of an hour on Saturday morning and for $\frac{1}{6}$ of an hour on Saturday evening. How much longer did Marc play in the morning than in the evening?

$\frac{1}{3}$	$\frac{1}{3}$
---------------	---------------

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

$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	→	$\frac{1}{6}$
---------------	---------------	---------------	---	---------------

15. Luanne wants to make a loaf of banana nut bread for a picnic. She decided to use $\frac{1}{2}$ of a cup fewer nuts than in the recipe. If the recipe called for the amount of nuts listed below, what amount of nuts did Luanne use?

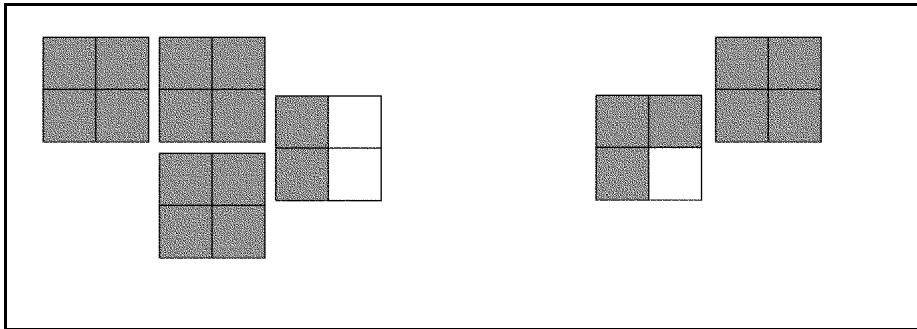


$\frac{7}{8}$ cup

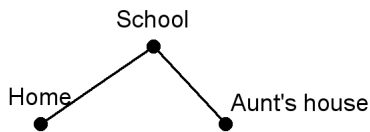
16. This is 1.



What is the total shaded amount in the box?



17. Steven walked $4\frac{3}{8}$ miles from home to the school and then $2\frac{13}{16}$ miles to his aunt's house. What was the total distance that Steven walked?



18. The following table shows how many hours Mrs. Fields worked in her garden last week.

GARDEN WORK	
Day	Hours
Monday	$3\frac{1}{2}$
Wednesday	$3\frac{3}{8}$

What is the total number of hours that Mrs. Fields worked in her garden last week?

19. Amber plays tennis for $3\frac{1}{3}$ hours. Gina plays tennis for $1\frac{1}{12}$ hours. How much longer does Amber play tennis than Gina?
20. Barry had a piece of rope similar to that shown. He cut the rope to make one piece $2\frac{9}{10}$ inches long. What was the length of the other piece?



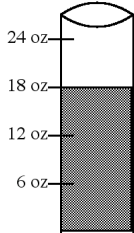
$$6\frac{2}{5} \text{ inches}$$

21. Olga and Elias each had 80 grapes. Olga ate $\frac{4}{5}$ of her grapes, and Elias ate $\frac{3}{4}$ of his grapes. How many grapes did they eat in all?
22. The students in a wood working class are making keepsake boxes. The design requires 9 wood strips, each $\frac{2}{3}$ foot long. How many feet of wood strips are needed for one box?

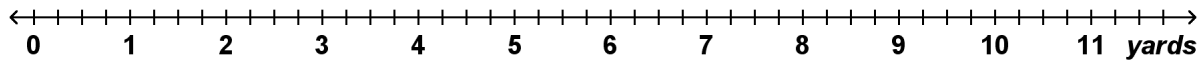
Name: _____

Form A

23. A restaurant uses $\frac{1}{2}$ ounce of lemon juice for each serving of lemonade. How many servings can they make from 18 ounces of lemon juice?



24. Miriam has 12 yards of fabric. She wants to sew placemats that each take $\frac{3}{4}$ yard of fabric. How many placemats can she sew?



5th Grade Chapter 8 – Fraction Operations Answer Section

MULTIPLE CHOICE

1. ANS: A REF: 0810 Lesson 8-10: Multiplying Fractions by Whole Numbers
OBJ: Use models or mental math to find fractions of whole numbers.
TOP: Intervention H37: Multiplying Fractions by Whole Numbers, NCTM 3-5: Num.2.1
KEY: fractions, multiplication, Science
2. ANS: A REF: 0801 Lesson 8-1: Adding and Subtracting Fractions with Like Denominators
OBJ: Add and subtract fractions with like denominators. STO: N.FL.05.18
TOP: Intervention H29: Adding and Subtracting Fractions: Like Denominators, NCTM 3-5: Num.3.5
KEY: fractions, subtraction
3. ANS: C REF: 0802 Lesson 8-2: Understanding Adding and Subtracting with Unlike Denominators
OBJ: Find a common denominator for two fractions using fraction strips.
STO: N.FL.05.14
TOP: Intervention H31: Adding and Subtracting Fractions: Unlike Denominators, NCTM 3-5: Num.3.5
KEY: fractions, addition
4. ANS: D REF: 0802 Lesson 8-2: Understanding Adding and Subtracting with Unlike Denominators
OBJ: Find a common denominator for two fractions using fraction strips.
STO: N.FL.05.14
TOP: Intervention H31: Adding and Subtracting Fractions: Unlike Denominators, NCTM 3-5: Num.3.5
KEY: fractions, subtraction
5. ANS: A REF: 0804 Lesson 8-4: Adding and Subtracting Fractions with Unlike Denominators
OBJ: Add and subtract fractions with unlike denominators.
TOP: Intervention H31: Adding and Subtracting Fractions: Unlike Denominators, NCTM 3-5: Num.3.5
KEY: fractions, subtraction
6. ANS: B REF: 0804 Lesson 8-4: Adding and Subtracting Fractions with Unlike Denominators
OBJ: Add and subtract fractions with unlike denominators.
TOP: Intervention H31: Adding and Subtracting Fractions: Unlike Denominators, NCTM 3-5: Num.3.5
KEY: fractions, addition
7. ANS: C REF: 0805 Lesson 8-5: Understanding Adding and Subtracting Mixed Numbers
OBJ: Add and subtract mixed numbers with and without renaming.
TOP: Intervention H32: Investigating Adding and Subtracting Mixed Numbers, NCTM 3-5: Num.3.5
KEY: mixed numbers, subtraction
8. ANS: D REF: 0807 Lesson 8-7: Adding Mixed Numbers
OBJ: Estimate sums and add mixed numbers.
TOP: Intervention H34: Adding Mixed Numbers, NCTM 3-5: Num.3.3, NCTM 3-5: Num.3.5
KEY: mixed numbers, estimation, addition

9. ANS: B REF: 0808 Lesson 8-8: Subtracting Mixed Numbers
 OBJ: Estimate differences and subtract mixed numbers.
 TOP: Intervention H35: Subtracting Mixed Numbers, NCTM 3-5: Num.3.3, NCTM 3-5: Num.3.5
 KEY: mixed numbers, estimation, subtraction
10. ANS: C REF: 0814 Lesson 8-14: Understanding Division with Fractions
 OBJ: Use models or mental math to divide fractions. STO: N.FL.05.13
 TOP: Intervention H41: Investigating Division with Fractions, NCTM 3-5: Num.2.1
 KEY: fractions, division

SHORT ANSWER

11. ANS:
 $\frac{3}{4}$ cup

REF: 0801 Lesson 8-1: Adding and Subtracting Fractions with Like Denominators
 OBJ: Add and subtract fractions with like denominators. STO: N.FL.05.18
 TOP: Intervention H29: Adding and Subtracting Fractions: Like Denominators, NCTM 3-5: Num.3.5
 KEY: fractions, addition

12. ANS:
 $\frac{5}{6}$ mile

REF: 0801 Lesson 8-1: Adding and Subtracting Fractions with Like Denominators
 OBJ: Add and subtract fractions with like denominators. STO: N.FL.05.18
 TOP: Intervention H29: Adding and Subtracting Fractions: Like Denominators, NCTM 3-5: Num.3.5
 KEY: fractions, addition, Physical Education

13. ANS:
 $\frac{1}{2}$

REF: 0802 Lesson 8-2: Understanding Adding and Subtracting with Unlike Denominators
 OBJ: Find a common denominator for two fractions using fraction strips.
 STO: N.FL.05.14
 TOP: Intervention H31: Adding and Subtracting Fractions: Unlike Denominators, NCTM 3-5: Num.3.5
 KEY: fractions, addition

14. ANS:
 $\frac{1}{2}$ of an hour

REF: 0802 Lesson 8-2: Understanding Adding and Subtracting with Unlike Denominators
 OBJ: Find a common denominator for two fractions using fraction strips.
 STO: N.FL.05.14
 TOP: Intervention H31: Adding and Subtracting Fractions: Unlike Denominators, NCTM 3-5: Num.3.5
 KEY: fractions, subtraction, Physical Education

15. ANS:

$$\frac{3}{8} \text{ cup}$$

REF: 0804 Lesson 8-4: Adding and Subtracting Fractions with Unlike Denominators

OBJ: Add and subtract fractions with unlike denominators.

TOP: Intervention H31: Adding and Subtracting Fractions: Unlike Denominators, NCTM 3-5: Num.3.5

KEY: fractions, subtraction

16. ANS:

$$5\frac{1}{4}$$

REF: 0805 Lesson 8-5: Understanding Adding and Subtracting Mixed Numbers

OBJ: Add and subtract mixed numbers with and without renaming.

TOP: Intervention H32: Investigating Adding and Subtracting Mixed Numbers, NCTM 3-5: Num.3.5

KEY: fractions, addition, mixed numbers

17. ANS:

$$7\frac{3}{16} \text{ miles}$$

REF: 0807 Lesson 8-7: Adding Mixed Numbers

OBJ: Estimate sums and add mixed numbers.

TOP: Intervention H34: Adding Mixed Numbers, NCTM 3-5: Num.3.3, NCTM 3-5: Num.3.5

KEY: fractions, addition, mixed numbers

18. ANS:

$$6\frac{7}{8} \text{ hours}$$

REF: 0807 Lesson 8-7: Adding Mixed Numbers

OBJ: Estimate sums and add mixed numbers.

TOP: Intervention H34: Adding Mixed Numbers, NCTM 3-5: Num.3.3, NCTM 3-5: Num.3.5

KEY: fractions, addition, mixed numbers

19. ANS:

$$2\frac{1}{4} \text{ hours}$$

REF: 0808 Lesson 8-8: Subtracting Mixed Numbers

OBJ: Estimate differences and subtract mixed numbers.

TOP: Intervention H35: Subtracting Mixed Numbers, NCTM 3-5: Num.3.3, NCTM 3-5: Num.3.5

KEY: fractions, subtraction, mixed numbers, Physical Education

20. ANS:

$$3\frac{1}{2} \text{ inches}$$

REF: 0808 Lesson 8-8: Subtracting Mixed Numbers

OBJ: Estimate differences and subtract mixed numbers.

TOP: Intervention H35: Subtracting Mixed Numbers, NCTM 3-5: Num.3.3, NCTM 3-5: Num.3.5

KEY: fractions, subtraction, mixed numbers

21. ANS:

124 grapes

REF: 0810 Lesson 8-10: Multiplying Fractions by Whole Numbers

OBJ: Use models or mental math to find fractions of whole numbers.

TOP: Intervention H37: Multiplying Fractions by Whole Numbers, NCTM 3-5: Num.2.1

KEY: fractions, multiplication

22. ANS:

6 feet

REF: 0812 Lesson 8-12: Multiplying Fractions

OBJ: Use models or paper and pencil to multiply fractions.

TOP: Intervention H39: Multiplying by a Fraction, NCTM 3-5: Geom.4.5

KEY: fractions, multiplication

23. ANS:

36 servings

REF: 0814 Lesson 8-14: Understanding Division with Fractions

OBJ: Use models or mental math to divide fractions. STO: N.FL.05.13

TOP: Intervention H41: Investigating Division with Fractions, NCTM 3-5: Num.2.1

KEY: fractions, division

24. ANS:

16 placemats

REF: 0814 Lesson 8-14: Understanding Division with Fractions

OBJ: Use models or mental math to divide fractions. STO: N.FL.05.13

TOP: Intervention H41: Investigating Division with Fractions, NCTM 3-5: Num.2.1

KEY: fractions, division