

Name \_\_\_\_\_

Date \_\_\_\_\_

Menu Math Fractions IV – Division

Class \_\_\_\_\_

**Directions:** Complete the below listed assignments in order while working independently this week. The packet is due Friday, January 8th.

\_\_\_\_\_ Pages 1&2 - Mixed Review

\_\_\_\_\_ Pages 3&4 – Fraction Word Problems

\_\_\_\_\_ Page 5 – Multiplying by greater than 1, less than 1, equal to 1 (Sizing)

\_\_\_\_\_ Page 6&7 – Fraction Practice Word Problems

\_\_\_\_\_ Page 8 – Dividing by non-unitary fractions (A)

\_\_\_\_\_ Page 9 – Dividing Improper by non-unitary fractions (same denominator) (B)

\_\_\_\_\_ Page 10 – Dividing Mixed #'s by non-unitary fractions (C)

\_\_\_\_\_ Page 11 – Dividing uncommon fractions (D)

\_\_\_\_\_ Page 12&13 – Magic Squares

Name: \_\_\_\_\_

Date \_\_\_\_\_

# Mixed Review

Class \_\_\_\_\_

**Directions:** Complete the following questions and show all work. Simplify all answers if necessary!

1) The 8 is  $\frac{1}{100}$  of which place value in the number 542.9071?

2) Which number is 10 times the value of the 3 in the number 42.31?

3) What is  $6\frac{2}{3}$  of 21?

4) Find the product:  $\frac{3}{9} \times \frac{4}{5}$

5) Find the product:  $5\frac{1}{2} \times 6$

6) Solve using the box method:  $3\frac{2}{4} \times 8\frac{1}{3}$

Name: \_\_\_\_\_

Date \_\_\_\_\_

Class \_\_\_\_\_

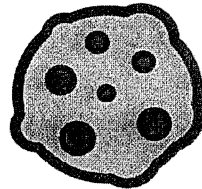
7) Evaluate: $4 \div \frac{1}{3}$	8) Solve: $\frac{1}{5} \div 3$
9) Order from least to greatest: $\frac{2}{5}, \frac{1}{6}, \frac{4}{8}$	10) Order from least to greatest: $\frac{5}{9}, \frac{3}{4}, \frac{1}{5}, \frac{7}{8}$
11) Evaluate. $7\frac{2}{3} + 32\frac{6}{9}$	12) Evaluate. $26\frac{1}{2} - 13\frac{3}{4}$
13) Compute: $(7 - 3) + 15 \div 3$	14) Compute: $6 + 12 \div 4$
15) What is the product of 513 and 7?	16) $80.9185 \times 10^4$

## Grade 5 Fractions Word Problems

Name: \_\_\_\_\_ Class: \_\_\_\_\_

### Question 1

Mother baked 14 cookies.  
She shared them equally among her 5 children.  
How many cookies did each child?



### Question 2

Peter was very thirsty and drank 2 glasses of water. There was  $\frac{3}{8}$  liter of water in the 1<sup>st</sup> glass and  $\frac{3}{5}$  liter in the 2<sup>nd</sup> glass. How much water did Peter drink altogether?

### Question 3

Mother bought  $3\frac{1}{6}$  kg of sugar. She used  $2\frac{1}{4}$  kg while baking cookies. How much sugar did she have left?



### Question 4

Yesterday Aron ran  $5\frac{3}{5}$  km. This morning Aron ran  $4\frac{3}{4}$  km.  
How far did Aron run altogether?

**Question 5**

A pizza has a mass of  $1\frac{1}{5}$  kg. A cake has a mass of  $2\frac{1}{4}$  kg.  
How much more does the cake weigh?



**Question 6**

John bought 75kg of chocolate. He packed the chocolate equally in 7 bags.  
How much chocolate did he pack in each bag?

**Question 7**

Joe earned 2,100\$. He spent  $\frac{1}{5}$  on rent and  $\frac{1}{3}$  on food.  
How much money did he have left?

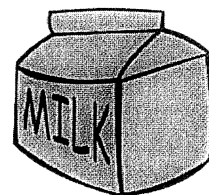


**Question 8**

Petra walked  $4\frac{1}{5}$  km. Mandy walked  $2\frac{1}{4}$  km less than Petra.  
How far did they walk altogether?

**Question 9**

Michael bought 2 liters of milk. He drank  $\frac{2}{5}$  liters of it and  
gave  $\frac{3}{8}$  liters to his brother. How much milk did Michael have  
left?



**Question 10**

A string has a length of 25 meters. Cindy cut the string in 4 pieces of equal length. How long was each piece?

**Question 11**

Jones ate  $\frac{1}{3}$  cake. Ronnie ate  $\frac{1}{4}$  cake more than Jones. How much cake did they eat altogether?



**Question 12**

Petra weighs  $60\frac{3}{4}$  kg. Mandy weighs  $59\frac{5}{8}$  kg.  
What is the difference between their weights?

Name \_\_\_\_\_  
Sizing \_\_\_\_\_

Date \_\_\_\_\_  
Class \_\_\_\_\_

Directions: Compare by estimating the product. Use  $>$ ,  $<$ ,  $=$ .

1)  $6 \times \frac{1}{3} \square 6$

2)  $4 \times \frac{4}{5} \square 4$

3)  $5 \times \frac{8}{3} \square 5$

4)  $7 \times \frac{4}{4} \square 7$

5)  $8 \times \frac{1}{2} \square 8$

6)  $8 \times \frac{5}{3} \square 8$

7)  $9 \times \frac{7}{8} \square 9$

8)  $10 \times \frac{1}{2} \square 10$

9)  $\frac{9}{4} \times 10 \square 10$

10)  $8 \times \frac{7}{5} \square 8$

11)  $3 \times \frac{9}{9} \square 3$

12)  $\frac{6}{5} \times 4 \square 4$

13)  $7 \times \frac{2}{2} \square 7$

14)  $19 \times \frac{6}{7} \square 19$

15)  $1\frac{2}{3} \times 4 \square 4$

16)  $5 \times \frac{9}{7} \square 5$

17)  $\frac{4}{9} \times 7 \square \frac{4}{9}$

18)  $16 \times 2\frac{1}{2} \square 16$

19)  $\frac{4}{2} \times 7 \square 7$

20)  $14 \times \frac{1}{2} \square 14$

Bonus: Fill in a fraction to make the statement true.

21)  $5 \times \square < 5$

22)  $5 \times \square > 5$

23)  $5 \times \square = 5$

Name \_\_\_\_\_

Date \_\_\_\_\_

Fraction Practice

Class \_\_\_\_\_

- 1) Darcy and Jordan each had  $\frac{1}{2}$  a candy bar. Darcy ate  $\frac{3}{4}$  of her portion. How much of the candy bar did Darcy eat?
  
  
  
  
  
  
  
  
  
  
- 2) Jackson's house and Bella's house are  $2\frac{3}{4}$  miles apart. From Jackson's house to Mandy's house is  $1\frac{1}{2}$  times as far. What is the distance from Jackson's house to Mandy's house?
  
  
  
  
  
  
  
  
  
  
- 3) Serena worked 18 hours last week for a landscaper. She worked  $\frac{1}{3}$  of those hours planting flowers and  $\frac{1}{2}$  of those hours mowing lawns.
  - a. How many hours did Serena work planting flowers?
  
  
  
  
  
  
  
  
  
  
  - b. How many hours did she spend mowing lawns?
  
  
  
  
  
  
  
  
  
  
  - c. What fraction of time did Serena spend doing tasks other than planting flowers and mowing lawns?
  
  
  
  
  
  
  
  
  
  
- 4) Three friends have  $\frac{1}{2}$  a pizza left. If they divide it evenly, what fraction of a pizza will each friend get?
  
  
  
  
  
  
  
  
  
  
- 5) Harrison's dog eats  $\frac{3}{4}$  pound of dog food each day. How many days will a 25-pound bag of dog food last?



- 6) John and two friends work at Footlocker. John worked 20 hours last week. His friend Marco worked  $1\frac{3}{4}$  as much as John. Marco worked 5 fewer hours than Serena.
- How long did Marco work?
  - How many hours did Serena work?
- 7) Linda lives  $3\frac{1}{4}$  miles from school. She walks  $\frac{1}{3}$  of the way to school, arriving at her friend Sam's house. From there, Sam and Linda walk to and from school together.
- How far does Linda walk to and from school every day?
  - How far does Sam walk to and from school every day?
  - How much further does Linda walk each day to and from school than Sam?
- 8) Amanda is making stuffing for Thanksgiving dinner. She needs  $1\frac{1}{2}$  loaves of bread,  $\frac{2}{3}$  cup of celery,  $\frac{1}{4}$  cup of carrots,  $\frac{2}{5}$  cup of chicken broth, and  $\frac{1}{8}$  cup of spices.
- How many total ingredients will be needed to make the stuffing?
  - What amount of ingredients will be needed to make two batches?
- 9) Ms. Lee is planning a pizza party for her students. She has 6 students that plan to eat  $\frac{1}{4}$  of a pizza each, 5 students that plan to eat  $\frac{3}{16}$  of a pizza each, and 8 students that plan to eat  $\frac{1}{8}$  of a pizza each. What is the fewest number of pizzas that Ms. Lee should plan to buy in order for all of her students to eat pizza?
- 10) Each day I read  $3\frac{1}{2}$  chapters of my 42 chapter book. If I read the same amount every day, how many days will it take me to read the entire book?

Name: \_\_\_\_\_

Date \_\_\_\_\_

Class \_\_\_\_\_

## Dividing by non-unitary fractions. (A)

1)  $\frac{8}{8} \div \frac{2}{8} =$

2)  $\frac{12}{12} \div \frac{3}{12} =$

3)  $\frac{4}{4} \div \frac{1}{4} =$

4)  $\frac{16}{16} \div \frac{4}{16} =$

9)  $\frac{15}{15} \div \frac{5}{15} =$

10)  $\frac{12}{12} \div \frac{4}{12} =$

11)  $\frac{27}{27} \div \frac{9}{27} =$

12)  $\frac{3}{3} \div \frac{1}{3} =$

5)  $\frac{8}{8} \div \frac{4}{8} =$

6)  $\frac{10}{10} \div \frac{5}{10} =$

7)  $\frac{80}{80} \div \frac{40}{80} =$

13)  $\frac{20}{20} \div \frac{4}{20} =$

15)  $\frac{100}{100} \div \frac{20}{100} =$

write a problem that fits # 5-7:

8)

Write a problem that follows the pattern for 13-15

16)

Explain in words any pattern for solving division problems w/ common denominators. (8)

Name: \_\_\_\_\_

Date \_\_\_\_\_

Dividing Improper by non-unitary fraction. (B) Class \_\_\_\_\_

1)  $\frac{5}{3} \div \frac{1}{3} =$

2)  $\frac{6}{5} \div \frac{2}{5} =$

3)  $\frac{4}{9} \div \frac{2}{9} =$

4)  $\frac{10}{11} \div \frac{2}{11} =$

5)  $\frac{8}{3} \div \frac{4}{3} =$

6)  $\frac{5}{7} \div \frac{5}{7} =$

7)  $\frac{14}{3} \div \frac{7}{3} =$

8)  $\frac{6}{18} \div \frac{3}{18} =$

9)  $\frac{14}{15} \div \frac{2}{15} =$

10)  $\frac{63}{2} \div \frac{21}{2} =$

11)  $\frac{8}{9} \div \frac{2}{9} =$

12)  $\frac{15}{17} \div \frac{3}{17} =$

13)  $\frac{24}{30} \div \frac{6}{30} =$

14)  $\frac{10}{15} \div \frac{2}{15} =$

15)  $\frac{16}{21} \div \frac{4}{21} =$

16)  $\frac{21}{22} \div \frac{7}{22} =$

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Dividing Mixed #'s by non-unitary fractions

Class: \_\_\_\_\_

1)  $1\frac{1}{3} \div \frac{1}{3} =$

9)  $6\frac{2}{5} \div \frac{4}{5} =$

2)  $2\frac{1}{4} \div \frac{3}{4} =$

10)  $4\frac{2}{5} \div \frac{11}{5} =$

3)  $6\frac{1}{4} \div \frac{5}{4} =$

11)  $3\frac{1}{8} \div \frac{5}{8} =$

4)  $4\frac{1}{5} \div \frac{3}{5} =$

12)  $5\frac{2}{5} \div \frac{3}{5} =$

5)  $5\frac{5}{8} \div \frac{5}{8} =$

13)  $4\frac{2}{9} \div \frac{16}{9} =$

6)  $1\frac{3}{7} \div \frac{1}{7} =$

14)  $1\frac{13}{14} \div \frac{15}{14} =$

7)  $1\frac{3}{5} \div \frac{4}{5} =$

15)  $3\frac{3}{7} \div \frac{3}{7} =$

8)  $3\frac{1}{3} \div \frac{2}{3} =$

16)  $3\frac{3}{7} \div \frac{8}{7} =$

17) Bonus: Can you write your own?

Name: \_\_\_\_\_

Date \_\_\_\_\_

## Dividing uncommon fractions (D)

Class \_\_\_\_\_

1)  $\frac{3}{5} \div \frac{1}{4}$

7)  $\frac{15}{16} \div \frac{1}{4}$

2)  $\frac{5}{6} \div \frac{1}{3}$

8)  $\frac{7}{8} \div \frac{1}{4}$

3)  $\frac{8}{9} \div \frac{2}{3}$

9)  $\frac{14}{15} \div \frac{2}{5}$

4)  $\frac{12}{15} \div \frac{1}{5}$

10)  $\frac{20}{25} \div \frac{1}{5}$

5)  $\frac{4}{10} \div \frac{2}{5}$

11)  $\frac{8}{15} \div \frac{1}{5}$

6)  $\frac{3}{8} \div \frac{2}{4}$

12)  $\frac{4}{9} \div \frac{1}{8}$

# Magic Squares: Fractions

Name: \_\_\_\_\_ Date: \_\_\_\_\_



A magic square is a grid of numbers where the values in each of the rows, columns and diagonals adds up to the same sum, known as the "magic number." Use your math skills to fill in each of these magic squares.

The magic number is  $8\frac{1}{2}$ .

4	$\frac{3}{4}$	$\frac{1}{2}$	$3\frac{1}{4}$	→ $8\frac{1}{2}$
$1\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	2	→ $8\frac{1}{2}$
$2\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	3	→ $8\frac{1}{2}$
1	$3\frac{3}{4}$	$3\frac{1}{2}$	$\frac{1}{4}$	→ $8\frac{1}{2}$

↓ ↓ ↓ ↓ ↓ ↓

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

The magic number is  $25\frac{1}{2}$ .

12		$1\frac{1}{2}$	
$3\frac{3}{4}$	$7\frac{1}{2}$	$8\frac{1}{4}$	
	$4\frac{1}{2}$		
	$11\frac{1}{4}$		$\frac{3}{4}$

The magic number is  $32\frac{1}{2}$ .

$4\frac{1}{2}$				$5\frac{1}{2}$
			6	
11			3	2
8	7		$2\frac{1}{2}$	$11\frac{1}{2}$
$7\frac{1}{2}$	4		12	$8\frac{1}{2}$

The magic number is  $83\frac{1}{4}$ .

$10\frac{1}{2}$	$9\frac{3}{4}$		9		24
$11\frac{1}{4}$		$8\frac{1}{4}$	$6\frac{3}{4}$		
$25\frac{1}{2}$	27	$13\frac{1}{2}$		$1\frac{1}{2}$	
$26\frac{1}{4}$	$24\frac{3}{4}$	$14\frac{1}{4}$		$2\frac{1}{4}$	$\frac{3}{4}$
$4\frac{1}{2}$		$19\frac{1}{2}$		$16\frac{1}{2}$	
		$20\frac{1}{4}$	$18\frac{3}{4}$	$17\frac{1}{4}$	$15\frac{3}{4}$

# Magic Squares: Fractions

Name: \_\_\_\_\_ Date: \_\_\_\_\_



A magic square is a grid of numbers where the values in each of the rows, columns and diagonals adds up to the same sum, known as the “magic number.” Use your math skills to fill in each of these magic squares.

The magic number is  $9\frac{3}{8}$ .

5	$\frac{5}{8}$	$3\frac{3}{4}$	→ $9\frac{3}{8}$
$1\frac{7}{8}$	$3\frac{1}{8}$	$4\frac{3}{8}$	→ $9\frac{3}{8}$
$2\frac{1}{2}$	$5\frac{5}{8}$	$1\frac{1}{4}$	→ $9\frac{3}{8}$
↙ $9\frac{3}{8}$	↓ $9\frac{3}{8}$	↓ $9\frac{3}{8}$	↓ $9\frac{3}{8}$
↓ $9\frac{3}{8}$	↓ $9\frac{3}{8}$	↓ $9\frac{3}{8}$	↓ $9\frac{3}{8}$

The magic number is  $18\frac{3}{4}$ .

$7\frac{1}{2}$		
$1\frac{1}{4}$		
	$3\frac{3}{4}$	

The magic number is  $12\frac{3}{4}$ .

6	$1\frac{1}{8}$	$\frac{3}{4}$	
		$4\frac{1}{8}$	
$3\frac{3}{8}$			$4\frac{1}{2}$
$1\frac{1}{2}$			$\frac{3}{8}$

The magic number is  $43\frac{1}{3}$ .

	$6\frac{2}{3}$	$2\frac{2}{3}$	$15\frac{1}{3}$	$11\frac{1}{3}$
		4	$3\frac{1}{3}$	16
$1\frac{1}{3}$		$13\frac{1}{3}$	$9\frac{1}{3}$	
6	2	$14\frac{2}{3}$		10

