

Name \_\_\_\_\_

Date \_\_\_\_\_

Menu Math Fractions III (Week 3) *All*

Class \_\_\_\_\_

**Directions:** Complete the below listed assignments in order while working independently this week. The packet is due Friday, December 18th.

\_\_\_\_\_ Page 1-2: Mixed Fraction Review 1

\_\_\_\_\_ Page 3 – 4: Dividing Whole Numbers and Unit Fractions Word Problems with Pictures

\_\_\_\_\_ Page 5: Dividing Whole Numbers and Unit Fractions (Greater than 1/Less than 1)

\_\_\_\_\_ Page 6: Redistributing Fractions

\_\_\_\_\_ Page 7-8: Mixed Fraction Review 2

\_\_\_\_\_ Page 9-10: Dividing Whole Numbers & Unit Fractions (Picture/Expression/Reasonableness)

\_\_\_\_\_ Page 11-12: Fraction Word Problems (Mixed operations)

\_\_\_\_\_ Page 13-14: Product Sizing (5NF5B)

Name \_\_\_\_\_

Date \_\_\_\_\_

Fraction Operations **Mixed Review 1**

Class \_\_\_\_\_

**Directions:** Solve each problem. Write answers in **simplest form**. Circle your answer.

1)

$$\frac{2}{5} \times \frac{7}{8}$$

2)

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

3)

$$2\frac{3}{5} + 8\frac{4}{9}$$

4)

$$\frac{4}{8} \times \frac{2}{4}$$

5)

$$3 \times 5\frac{1}{2}$$

6)

$$15\frac{2}{5} - 12\frac{1}{2}$$

7)

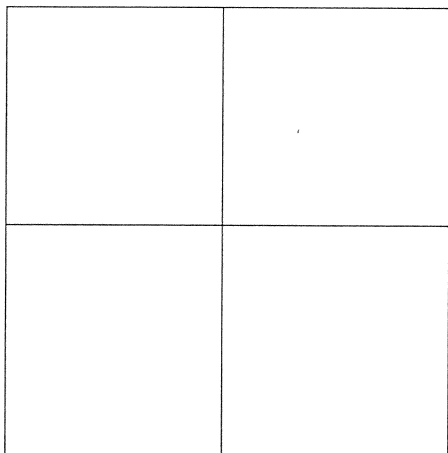
$$9\frac{1}{4} + 5\frac{2}{5}$$

8)

$$\frac{4}{5} \times 6\frac{2}{3}$$

9)

$$6\frac{1}{2} \times 2\frac{3}{9}$$



10)

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

11)

$$\frac{5}{7} \times 1\frac{1}{2}$$

12)

$$15 \div \frac{1}{2}$$

13)

$$5\frac{2}{9} - 1\frac{3}{5}$$

14)

$$\frac{1}{6} \div 11$$

**Directions:** Solve each problem by drawing a picture and writing an expression to match the picture and problem. Evaluate the reasonableness of your answer by rereading the question

- 1) Xavier, Kendel, Shian, and Elizabeth each shared an equal portion of a cake that was left over from 5B's holiday party. 5B had eaten  $\frac{4}{5}$  of the cake. If the kids shared equally the remaining portion, what fraction of the cake did each student eat?

Picture	Expression	Answer	Is it Reasonable?

- 2) Each cake batch requires  $\frac{1}{4}$  cups of flour. How many cakes can be made from 3 cups of flour?

Picture	Expression	Answer	Is it Reasonable?

- 3) A gallon of milk was half full. If I used the milk to make 6 equivalent bottles, what fraction of the gallon did Samantha drink in each bottle?

Picture	Expression	Answer	Is it Reasonable?

Name \_\_\_\_\_

Date \_\_\_\_\_

5NF7 Dividing Whole numbers and unit fractions

Class \_\_\_\_\_

- 4) The bottle of soda was  $\frac{1}{5}$  full. I poured three equal glasses of soda from the remaining amount. What fraction of the bottle of soda does each glass represent?

Picture	Expression	Answer	Is it Reasonable?

- 5) Making a cake requires  $\frac{1}{3}$  pound of sugar. How many cakes will I be able to make with five pounds of sugar?

Picture	Expression	Answer	Is it Reasonable?

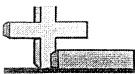
- b) If each cake required  $\frac{2}{3}$  pounds of sugar, could I make fewer or more cakes with the same 5 pounds? How many cakes could be made if each requires  $\frac{2}{3}$  pounds of sugar?

- 6) There are 6 students attending math enrichment. Mrs. Davis has 4 granola bars. Write and solve an expression that represents what amount of granola bars each student will receive if they are divided equally among all of the six students?

Picture	Expression	Answer	Is it Reasonable?

**Directions:** Read each question and decide whether the answer will be greater than one or less than one. Set up the expression based on this and solve.

Question	Less than / Greater than One Whole	Expression	Solution
1) There are two candy bars and six people. How much will each person get if everyone gets equal amounts?	2 candy bars 6 people = less than 1/per person	$2 \div 6$	$\frac{1}{3}$ candy bar Per person
2) There are 20 students and 7 pizzas have been ordered. How much pizza will each student get if everyone gets an equal amount?			
3) There are fifteen muffins and 7 children. If everyone gets an equal amount of muffins, how much will each child receive?			
4) Each cake requires $\frac{1}{3}$ cup of sugar. I have 4 cups of sugar. How many cakes can be made?			
5) 5 students plan to read aloud the remaining $\frac{1}{3}$ of the book. If each student reads the same amount, how much does each student read?			
6) There are two cookies and three children, how much should each student receive if they share the cookies equally?			
7) I have seven pounds of cookie dough. If each cookie is made with $\frac{1}{8}$ of a pound of cookie dough, how many cookies of equal size can I make?			



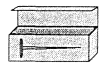
Solve each problem.

Answers

- 1) A builder had several boxes of nails that were partially full.



$\frac{1}{7}$



$\frac{6}{7}$



$\frac{5}{7}$



$\frac{4}{7}$



$\frac{5}{7}$

If he reorganized the nails so each box had the same quantity, how full would each box be?

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

- 2) Look at the weight of the boxes below.



$\frac{5}{8}$



$\frac{7}{8}$



$\frac{1}{8}$



$\frac{6}{8}$



$\frac{1}{8}$



$\frac{2}{8}$



$\frac{3}{8}$

If you were to redistribute the material in the boxes so that each box had the same weight, how much would each weigh?

- 3) The bags of candy below are fractions of a pound.



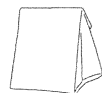
$\frac{6}{8}$



$\frac{4}{8}$



$\frac{3}{8}$



$\frac{3}{8}$



$\frac{3}{8}$



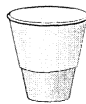
$\frac{4}{8}$

If you were to redistribute the candy so that each bag had the same amount, how much would be in each?

- 4) At a party, cups were filled with different amounts of soda.



$\frac{3}{6}$



$\frac{2}{6}$



$\frac{5}{6}$



$\frac{1}{6}$



$\frac{1}{6}$



$\frac{5}{6}$



$\frac{5}{6}$



$\frac{3}{6}$



$\frac{2}{6}$

If the soda had been poured into the cups evenly, how much would be in each cup?

- 5) The pitchers below have different amounts of water in them.



$\frac{2}{4}$



$\frac{1}{4}$



$\frac{3}{4}$



$\frac{1}{4}$



$\frac{1}{4}$



$\frac{3}{4}$



$\frac{1}{4}$



$\frac{1}{4}$

If you were to redistribute the water so that each pitcher had the same amount, how much would be in each?

**Directions:** Solve each problem. Write answers in **simplest form**. Circle your answer.

1)

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

2)

$$\frac{1}{9} \times \frac{2}{4}$$

3)

$$12\frac{3}{4} - 10\frac{1}{2}$$

4)

$$\frac{6}{7} \times \frac{2}{3}$$

5)

$$2\frac{3}{4} \times 5$$

6)

$$2\frac{2}{4} + 3\frac{1}{5}$$

7)

$$\frac{1}{5} \div 7$$

8)

$$2 \times \frac{3}{4}$$



9)

$$8 \div \frac{1}{3}$$

10)

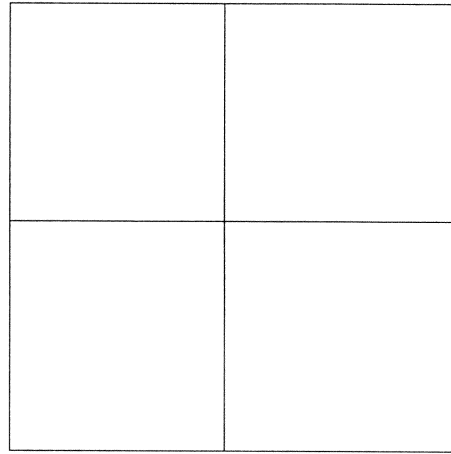
$$7\frac{1}{3} \times 2$$

11)

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

12)

$$4\frac{2}{5} \times 3\frac{2}{4}$$



13)

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

14)

$$\frac{1}{6} \div 4$$

**Directions:** Solve each problem by drawing a picture and writing an expression to match the picture and problem. Evaluate the reasonableness of your answer by rereading the question

- 1) After Melody's birthday party one third of the cake was left over. The next day Melody and her two brothers ate equal portions of the remaining portion? How much of the cake did each of them eat?

Picture	Expression	Answer	Is it Reasonable?

- 2) Each batch of bread requires  $\frac{1}{4}$  cups of flour. How many loaves of bread can be made from 7 cups of flour?

Picture	Expression	Answer	Is it Reasonable?

- 3) A gallon of milk was  $\frac{1}{5}$  full. I poured 6 equal glasses of milk from what was remaining. What fraction of the gallon is represented in each glass?

Picture	Expression	Answer	Is it Reasonable?

4) Johnna owns  $\frac{1}{6}$  of an acre. She planted an equal portion of carrots, tomatoes, and peppers on her land. What fraction of her land was planted with carrots?

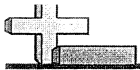
Picture	Expression	Answer	Is it Reasonable?

5) A book is 18 chapters. If I can read  $3\frac{1}{2}$  chapters each day, how many days will it take me to read the entire book?

Picture	Expression	Answer	Is it Reasonable?

6) I need lengths of ribbon that  $\frac{1}{8}$  of a foot long. If I have a length of ribbon that is 5 feet long, how many ribbons can I make?

Picture	Expression	Answer	Is it Reasonable?

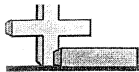


Solve each problem. Write your answer as a mixed number (if possible).

Answers

- 1) An adult turtle weighed  $3 \frac{3}{4}$  ounces. How much would 3 adult turtles weigh? 1. \_\_\_\_\_
- 2) A new washing machine used  $3 \frac{2}{4}$  gallons of water per full load to clean clothes. If John washed  $2 \frac{2}{3}$  loads of clothes, how many gallons of water would be used? 2. \_\_\_\_\_
- 3) On Halloween 4 friends each received  $\frac{4}{5}$  of a pound of candy. How much candy did they receive total? 3. \_\_\_\_\_
- 4) On Monday Ned picked up  $\frac{3}{9}$  of a pound of cans to recycle. On Tuesday he picked up  $\frac{3}{4}$  that amount. How many pounds did Ned pick up on Tuesday? 4. \_\_\_\_\_
- 5) An old wooden post was  $4 \frac{3}{5}$  feet long. If you were to cut off  $\frac{1}{6}$  of it, how much would you have cut off? 5. \_\_\_\_\_
- 6) A restaurant had 2 full boxes of spoons and  $\frac{5}{8}$  of a box. If each full box weighed 3 kilograms, what is the combined weight of the boxes the restaurant has? 6. \_\_\_\_\_
- 7) A batch of chicken required  $2 \frac{1}{3}$  cups of flour. If a fast food restaurant was making  $4 \frac{1}{3}$  batches, how much flour would they need? 7. \_\_\_\_\_
- 8) A water pitcher could hold  $\frac{1}{2}$  of a gallon of water. If Paul filled up 4 pitchers, how much water would he have? 8. \_\_\_\_\_
- 9) Will picked  $\frac{2}{4}$  a pound of apples, but  $\frac{2}{3}$  of them were bad. Of the apples Will picked, how many pounds were bad? 9. \_\_\_\_\_
- 10) A full tub of water weighed  $3 \frac{1}{8}$  pounds. If the tub were filled up only  $\frac{2}{7}$  full, how much would it weigh? 10. \_\_\_\_\_
- 11) A box of pencils weighed  $4 \frac{2}{5}$  ounces. If a principal ordered 3 boxes, how much would they weigh? 11. \_\_\_\_\_
- 12) A bottle of home-made cleaning solution took  $2 \frac{1}{5}$  milliliters of lemon juice. If Megan wanted to make  $2 \frac{1}{4}$  bottles, how many milliliters of lemon juice would she need? 12. \_\_\_\_\_





Solve each problem. *Write an expression and solve.*

Answers

- 1) How many one-third cup servings are in 6 cups of pecans?
- 2) A pet store had 4 cats to feed. If they only had one-fifth of a bag of cat food and each cat got the same amount, what fraction of the bag would each cat get?
- 3) A farmer was dividing up his one-third of an acre of land between his 5 children. Since each child got the same amount of land, what fraction of the acre did each get?
- 4) A store had 4 boxes of video games. How many days would it take to sell the games if each day they sold one-fifth of a box?
- 5) An artist was able to draw one-seventh of a picture every hour. If he needed to paint 8 pictures for an art show, how many hours would it take him?
- 6) A moving company had one-sixth of a ton of weight to move across town. If they wanted to split it equally amongst 4 trips, how much weight would they have on each trip?
- 7) A malt shop used one-fourth of a box of waffle cones every day they were open. How many days would 2 whole boxes last them?
- 8) A glass of water was one-eighth of a liter. How many glasses would it take to fill up a 3 liter jug?
- 9) A container of 8 metal beams weighed one-fourth of a ton. If every beam weighed the same amount, how heavy was each?
- 10) An aquarium had 6 tons of fish food. How many months would it take them to use it all if they used one-seventh of a ton each month?
- 11) At a restaurant 6 people were at a table when the waiter brought out one-fifth of a bowl of cheese dip. If they split the bowl evenly, how much would each person get?
- 12) A lawn mowing company had to mow one-ninth of a mile of grass. To make it quicker, they split the amount evenly between 2 workers. What fraction of the mile did each person mow?
- 13) A chef had 7 potatoes. How many bowls of mashed potatoes could he make if each bowl used one-seventh of a potato?

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_

11. \_\_\_\_\_

12. \_\_\_\_\_

13. \_\_\_\_\_

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

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

## Size of Products

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

Directions: Without calculating the exact product, determine if the product would be greater, less than, or equal to the value.

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

12)  $6 \times \frac{1}{3} \square \frac{1}{3}$

2)  $\frac{3}{4} \times 18 \square 18$

13)  $4\frac{1}{2} \times 2 \square 4\frac{1}{2}$

3)  $7\frac{1}{2} \times \frac{5}{4} \square 7\frac{1}{2}$

14)  $8\frac{2}{7} \times \frac{4}{4} \square 8\frac{2}{7}$

4)  $\frac{5}{5} \times 4\frac{1}{3} \square 4\frac{1}{3}$

15)  $\frac{3}{4} \times \frac{8}{9} \square \frac{8}{9}$

5)  $1\frac{1}{3} \times 8 \square 8$

16)  $\frac{3}{5} \times \frac{1}{4} \square \frac{3}{5}$

6)  $\frac{5}{3} \times 9 \square 9$

17)  $\frac{8}{3} \times \frac{1}{4} \square \frac{8}{3}$

7)  $1\frac{1}{2} \times 1\frac{1}{2} \square 1\frac{1}{2}$

18)  $\frac{9}{10} \times \frac{7}{8} \square \frac{9}{10}$

8)  $14 \times \frac{2}{3} \square 14$

19)  $6 \times \frac{5}{5} \square \frac{5}{5}$

9)  $11 \times 1\frac{4}{9} \square 11$

20)  $1\frac{1}{3} \times 2\frac{8}{9} \square 1\frac{1}{3}$

10)  $\frac{3}{7} \times 2\frac{1}{9} \square 2\frac{1}{9}$

21)  $3 \times \frac{2}{7} \square \frac{2}{7}$

11)  $\frac{6}{1} \times 4\frac{4}{8} \square \frac{6}{1}$

22)  $\frac{2}{7} \times 3 \square 3$

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

Score : \_\_\_\_\_

Teacher : \_\_\_\_\_

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

Compare the product to the given value w/out calculating  
the exact product.

Multiplying Mixed Numbers

- 1)  $4\frac{1}{4} \times \frac{4}{5}$    $4\frac{1}{4}$
- 2)  $\frac{4}{5} \times 4\frac{1}{2}$    $4\frac{1}{2}$
- 3)  $4\frac{7}{10} \times \frac{1}{2}$    $\frac{1}{2}$
- 4)  $\frac{1}{2} \times 2\frac{2}{3}$    $2\frac{2}{3}$
- 5)  $2\frac{2}{3} \times \frac{4}{2}$    $2\frac{2}{3}$
- 6)  $2\frac{2}{5} \times \frac{1}{2}$    $2\frac{2}{5}$
- 7)  $\frac{3}{4} \times 4\frac{1}{3}$    $\frac{3}{4}$
- 8)  $3\frac{4}{5} \times \frac{1}{2}$    $3\frac{4}{5}$
- 9)  $\frac{7}{10} \times 2\frac{3}{4}$    $2\frac{3}{4}$
- 10)  $4\frac{3}{4} \times \frac{12}{3}$    $4\frac{3}{4}$
- 11)  $\frac{11}{10} \times \frac{7}{4}$    $\frac{7}{4}$
- 12)  $2\frac{1}{2} \times 2\frac{1}{2}$    $2\frac{1}{2}$
- 13)  $4\frac{4}{5} \times 2\frac{1}{3}$    $4\frac{4}{5}$
- 14)  $\frac{1}{2} \times \frac{2}{5}$    $\frac{2}{5}$
- 15)  $\frac{2}{3} \times \frac{1}{2}$    $\frac{2}{3}$