Name _____ Date _____

1. Draw a tape diagram to model each comparison. Use >, <, or = to compare.

a. $3\frac{2}{3}$ _____ $3\frac{5}{6}$

b. $3\frac{2}{5}$ _____ $3\frac{6}{10}$

c. $4\frac{3}{6}$ _____ $4\frac{1}{3}$

d. $4\frac{5}{8}$ _____ $\frac{19}{4}$

2. Use an area model to make like units. Then, use >, <, or = to compare.

a. $2\frac{3}{5}$ _____ $\frac{18}{7}$

b. $2\frac{3}{8}$ _____ $2\frac{1}{3}$

3. Compare each pair of fractions using >, <, or = using any strategy.

a. $5\frac{3}{4}$ _____ $5\frac{3}{8}$

b. $5\frac{2}{5}$ _____ $5\frac{8}{10}$

c. $5\frac{6}{10}$ _____ $\frac{27}{5}$

d. $5\frac{2}{3}$ _____ $5\frac{9}{15}$

e. $\frac{7}{2}$ _____ $\frac{7}{3}$

f. $\frac{12}{3}$ _____ $\frac{15}{4}$

g. $\frac{22}{5}$ _____ $4\frac{2}{7}$

h $\frac{21}{4}$ _____ $5\frac{2}{5}$

i. $\frac{29}{8}$ _____ $\frac{11}{3}$

j. $3\frac{3}{4}$ _____ $3\frac{4}{7}$

Name _____ Date _____

1. Draw a tape diagram to model each comparison. Use >, <, or = to compare.

a. $2\frac{3}{4}$ _____ $2\frac{7}{8}$

b. $10\frac{2}{6}$ _____ $10\frac{1}{3}$

c. $5\frac{3}{8}$ _____ $5\frac{1}{4}$

d. $2\frac{5}{9}$ _____ $\frac{21}{3}$

2. Use an area model to make like units. Then, use >, <, or = to compare.

a. $2\frac{4}{5}$ _____ $\frac{11}{4}$

b. $2\frac{3}{5}$ _____ $2\frac{2}{3}$

3. Compare each pair of fractions using >, <, or = using any strategy.

a. $6\frac{1}{2}$ _____ $6\frac{3}{8}$

b. $7\frac{5}{6}$ _____ $7\frac{11}{12}$

c. $3\frac{6}{10}$ _____ $3\frac{2}{5}$

d. $2\frac{2}{5}$ _____ $2\frac{8}{15}$

e. $\frac{10}{3}$ _____ $\frac{10}{4}$

f. $\frac{12}{4}$ _____ $\frac{10}{3}$

g. $\frac{38}{9}$ _____ $4\frac{2}{12}$

h. $\frac{23}{4}$ _____ $5\frac{2}{3}$

i. $\frac{30}{8}$ _____ $3\frac{7}{12}$

j. $10\frac{3}{4}$ _____ $10\frac{4}{6}$

Name _____ Date _____

1. The chart to the right shows the distance fourth graders in Ms. Smith's class were able to run before stopping for a rest. Create a line plot to display the data in the table.

Student	Distance (in miles)
Joe	$2\frac{1}{2}$
Arianna	$1\frac{3}{4}$
Bobbi	$2\frac{1}{8}$
Morgan	$1\frac{5}{8}$
Jack	$2\frac{5}{8}$
Saisha	$2\frac{1}{4}$
Tyler	$2\frac{2}{4}$
Jenny	$\frac{5}{8}$
Anson	$2\frac{2}{8}$
Chandra	$2\frac{4}{8}$

2. Solve each problem.
   a. Who ran a mile farther than Jenny?

   b. Who ran a mile less than Jack?

   c. Two students ran exactly $2\frac{1}{4}$ miles. Identify the students. How many quarter miles did each student run?

   d. What is the difference, in miles, between the longest and shortest distance run?

   e. Compare the distances run by Arianna and Morgan using >, <, or =.

   f. Ms. Smith ran twice as far as Jenny. How far did Ms. Smith run? Write her distance as a mixed number.

   g. Mr. Reynolds ran $1\frac{3}{10}$ miles. Use >, <, or = to compare the distance Mr. Reynolds ran to the distance that Ms. Smith ran. Who ran farther?

3. Using the information in the table and on the line plot, develop and write a question similar to those above. Solve, and then ask your partner to solve. Did you solve in the same way? Did you get the same answer?

Name _____ Date _____

1. A group of students measured the lengths of their shoes. The measurements are shown in the table. Make a line plot to display the data.

Students	Length of shoe (in inches)
Collin	$8\frac{1}{2}$
Dickon	$7\frac{3}{4}$
Ben	$7\frac{1}{2}$
Martha	$7\frac{3}{4}$
Lilias	8
Susan	$8\frac{1}{2}$
Frances	$7\frac{3}{4}$
Mary	$8\frac{3}{4}$

2. Solve each problem.

   a. Who has a shoe length 1 inch longer than Dickon's?

   b. Who has a shoe length 1 inch shorter than Susan's?

c. How many quarter inches long is Martha's shoe length?

d. What is the difference, in inches, between Lilias's and Martha's shoe lengths?

e. Compare the shoe length of Ben and Frances using >, <, or =.

f. How many students had shoes that measured less than 8 inches?

g. How many students measured the length of their shoes?

h. Mr. Jones's shoe length was $\frac{25}{2}$ inches. Use >, <, or = to compare the length of Mr. Jones's shoe to the length of the longest student shoe length. Who had the longer shoe?

3. Using the information in the table and on the line plot, write a question you could solve by using the line plot. Solve.

Name _____ Date _____

1. Solve.

a. $3\frac{1}{4} + \frac{1}{4}$

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

c. $\frac{3}{8} + 5\frac{2}{8}$

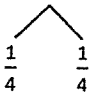
d. $\frac{1}{8} + 6\frac{7}{8}$

2. Complete the number sentences.

a. $4\frac{7}{8} + \_\_\_\_ = 5$	b. $7\frac{2}{5} + \_\_\_\_ = 8$
c. $3 = 2\frac{1}{6} + \_\_\_\_$	d. $12 = 11\frac{1}{12} + \_\_\_\_$

3. Use a number bond and the arrow way to show how to make one. Solve.

a. $2\frac{3}{4} + \frac{2}{4}$



b. $3\frac{3}{5} + \frac{3}{5}$

4. Solve.

a. $4\frac{2}{3} + \frac{2}{3}$	b. $3\frac{3}{5} + \frac{4}{5}$
c. $5\frac{4}{6} + \frac{5}{6}$	d. $\frac{7}{8} + 6\frac{4}{8}$
e. $\frac{7}{10} + 7\frac{9}{10}$	f. $9\frac{7}{12} + \frac{11}{12}$
g. $2\frac{70}{100} + \frac{87}{100}$	h. $\frac{50}{100} + 16\frac{78}{100}$

5. To solve $7\frac{9}{10}+\frac{5}{10}$, Maria thought, "$7\frac{9}{10}+\frac{1}{10}=8$ and $8+\frac{4}{10}=8\frac{4}{10}$."

   Paul thought, "$7\frac{9}{10}+\frac{5}{10}=7\frac{14}{10}=7+\frac{10}{10}+\frac{4}{10}=8\frac{4}{10}$." Explain why Maria and Paul are both right.

Name _____ Date _____

1. Solve.

a. $4\frac{1}{3} + \frac{1}{3}$

b. $5\frac{1}{4} + \frac{2}{4}$

c. $\frac{2}{6} + 3\frac{4}{6}$

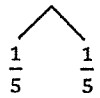
d. $\frac{5}{8} + 7\frac{3}{8}$

2. Complete the number sentences.

a. $3\frac{5}{6} + \_\_\_\_ = 4$	b. $5\frac{3}{7} + \_\_\_ = 6$
c. $5 = 4\frac{1}{8} + \_\_\_\_$	d. $15 = 14\frac{4}{12} + \_\_\_\_$

3. Draw a number bond and the arrow way to show how to make one. Solve.

a. $2\frac{4}{5} + \frac{2}{5}$



b. $3\frac{2}{3} + \frac{2}{3}$

c. $4\frac{4}{6} + \frac{5}{6}$

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

4. Solve.

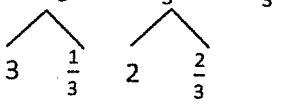
a. $2\frac{3}{5} + \frac{3}{5}$	b. $3\frac{6}{8} + \frac{4}{8}$
c. $5\frac{4}{6} + \frac{3}{6}$	d. $\frac{7}{10} + 6\frac{6}{10}$
e. $\frac{5}{10} + 8\frac{9}{10}$	f. $7\frac{8}{12} + \frac{11}{12}$
g. $3\frac{90}{100} + \frac{58}{100}$	h. $\frac{60}{100} + 14\frac{79}{100}$

5. To solve $4\frac{8}{10}+\frac{3}{10}$, Carmen thought, "$4\frac{8}{10}+\frac{2}{10}=5$, and $5+\frac{1}{10}=5\frac{1}{10}$."
Benny thought, "$4\frac{8}{10}+\frac{3}{10}=4\frac{11}{10}=4+\frac{10}{10}+\frac{1}{10}=5\frac{1}{10}$." Explain why Carmen and Benny are both right.

Name _____ Date _____

1. Solve.

a. $3\frac{1}{3} + 2\frac{2}{3} = 5 + \frac{3}{3} =$

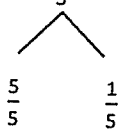


b. $4\frac{1}{4} + 3\frac{2}{4}$

c. $2\frac{2}{6} + 6\frac{4}{6}$

2. Solve. Use a number line to show your work.

a. $2\frac{4}{5} + 1\frac{2}{5} = 3 + \frac{6}{5} =$ _____



b. $1\frac{3}{4} + 3\frac{3}{4}$

c. $3\frac{3}{8} + 2\frac{6}{8}$

3. Solve. Use the arrow way to show how to make one.

   a. $2\frac{4}{6} + 1\frac{5}{6} = 3\frac{4}{6} + \frac{5}{6} =$

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

   b. $1\frac{3}{4} + 3\frac{3}{4}$

   c. $3\frac{3}{8} + 2\frac{6}{8}$

4. Solve. Use whichever method you prefer.

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

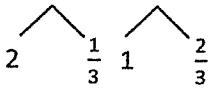
   b. $2\frac{6}{8} + 3\frac{7}{8}$

   c. $3\frac{8}{12} + 2\frac{7}{12}$

Name _____ Date _____

1. Solve.

a. $2\frac{1}{3} + 1\frac{2}{3} = 3 + \frac{3}{3} =$

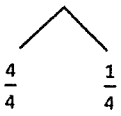


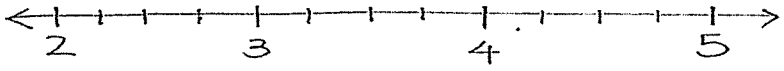
b. $2\frac{2}{5} + 2\frac{2}{5}$

c. $3\frac{3}{8} + 1\frac{5}{8}$

2. Solve. Use a number line to show your work.

a. $2\frac{2}{4} + 1\frac{3}{4} = 3 + \frac{5}{4} =$ _____





b. $3\frac{4}{6} + 2\frac{5}{6}$

c. $1\frac{9}{12} + 1\frac{7}{12}$

3. Solve. Use the arrow way to show how to make one.

a. $2\frac{3}{4} + 1\frac{3}{4} = 3\frac{3}{4} + \frac{3}{4} =$

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

$3\frac{3}{4} \xrightarrow{+\frac{1}{4}} 4 \longrightarrow$

b. $2\frac{7}{8} + 3\frac{4}{8}$

c. $1\frac{7}{9} + 4\frac{5}{9}$

4. Solve. Use whichever method you prefer.

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

b. $3\frac{8}{10} + 1\frac{5}{10}$

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

Name _____ Date _____

1. Subtract. Model with a number line or the arrow way.

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

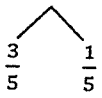
b. $4\frac{7}{10} - \frac{3}{10}$

c. $5\frac{1}{3} - \frac{2}{3}$

d. $9\frac{3}{5} - \frac{4}{5}$

2. Use decomposition to subtract the fractions. Model with a number line or the arrow way.

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



b. $4\frac{1}{4} - \frac{2}{4}$

c. $5\frac{1}{3} - \frac{2}{3}$

d. $2\frac{3}{8} - \frac{5}{8}$

3. Decompose the total to subtract the fractions.

a. $3\frac{1}{8} - \frac{3}{8} = 2\frac{1}{8} + \frac{5}{8} = 2\frac{6}{8}$

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

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

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

d. $5\frac{4}{6} - \frac{5}{6}$

e. $6\frac{4}{12} - \frac{7}{12}$

f. $9\frac{1}{8} - \frac{5}{8}$

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

h. $8\frac{3}{10} - \frac{4}{10}$

i. $12\frac{3}{5} - \frac{4}{5}$

j. $11\frac{2}{6} - \frac{5}{6}$

Name _____ Date _____

1. Subtract. Model with a number line or the arrow way.

a. $6\frac{3}{5} - \frac{1}{5}$

b. $4\frac{9}{12} - \frac{7}{12}$

c. $7\frac{1}{4} - \frac{3}{4}$

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

2. Use decomposition to subtract the fractions. Model with a number line or the arrow way.

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

$\frac{2}{5}$ $\frac{2}{5}$

b. $2\frac{1}{3} - \frac{2}{3}$

c. $4\frac{1}{6} - \frac{4}{6}$

d. $3\frac{3}{6} - \frac{5}{6}$

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

f. $7\frac{1}{10} - \frac{6}{10}$

g. $10\frac{1}{8} - \frac{5}{8}$

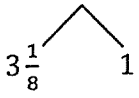
h. $9\frac{4}{12} - \frac{7}{12}$

i. $11\frac{3}{5} - \frac{4}{5}$

j. $17\frac{1}{9} - \frac{5}{9}$

3. Decompose the total to subtract the fractions.

a. $4\frac{1}{8} - \frac{3}{8} = 3\frac{1}{8} + \frac{5}{8} = 3\frac{6}{8}$



b. $5\frac{2}{5} - \frac{3}{5}$

c. $7\frac{1}{8} - \frac{3}{8}$

d. $3\frac{3}{9} - \frac{4}{9}$

e. $6\frac{3}{10} - \frac{7}{10}$

f. $2\frac{5}{9} - \frac{8}{9}$

Name _____ Date _____

1. Write a related addition sentence. Subtract by counting on. Use a number line or the arrow way to help. The first one has been partially done for you.

   a. $3\frac{1}{3} - 1\frac{2}{3} =$ _____

   $1\frac{2}{3} +$ _____ $= 3\frac{1}{3}$

   b. $5\frac{1}{4} - 2\frac{3}{4} =$ _____

2. Subtract, as shown in Problem 2(a), by decomposing the fractional part of the number you are subtracting. Use a number line or the arrow way to help you.

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

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

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

   c. $5\frac{3}{7} - 3\frac{6}{7}$

3. Subtract, as shown in Problem 3(a), by decomposing to take one out.

a. $5\frac{3}{5} - 2\frac{4}{5} = 3\frac{3}{5} - \frac{4}{5}$

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

b. $4\frac{3}{6} - 3\frac{5}{6}$

c. $8\frac{3}{10} - 2\frac{7}{10}$

4. Solve using any method.

a. $6\frac{1}{4} - 3\frac{3}{4}$

b. $5\frac{1}{8} - 2\frac{7}{8}$

c. $8\frac{3}{12} - 3\frac{8}{12}$

d. $5\frac{1}{100} - 2\frac{97}{100}$

Name _____ Date _____

1. Write a related addition sentence. Subtract by counting on. Use a number line or the arrow way to help. The first one has been partially done for you.

   a. $3\frac{2}{5} - 1\frac{4}{5} = \_\_\_\_$

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

   b. $5\frac{3}{8} - 2\frac{5}{8}$

2. Subtract, as shown in Problem 2(a) below, by decomposing the fractional part of the number you are subtracting. Use a number line or the arrow way to help you.

   a. $4\frac{1}{5} - 1\frac{3}{5} = 3\frac{1}{5} - \frac{3}{5} = 2\frac{3}{5}$

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

   b. $4\frac{1}{7} - 2\frac{4}{7}$

   c. $5\frac{5}{12} - 3\frac{8}{12}$

3. Subtract, as shown in 3(a) below, by decomposing to take one out.

a. $5\frac{5}{8} - 2\frac{7}{8} = 3\frac{5}{8} - \frac{7}{8} =$

$2\frac{5}{8}$ $\quad$ 1

b. $4\frac{3}{12} - 3\frac{8}{12}$

c. $9\frac{1}{10} - 6\frac{9}{10}$

4. Solve using any strategy.

a. $6\frac{1}{9} - 4\frac{3}{9}$

b. $5\frac{3}{10} - 3\frac{6}{10}$

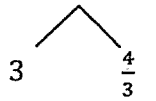
c. $8\frac{7}{12} - 5\frac{9}{12}$

d. $7\frac{4}{100} - 2\frac{92}{100}$

Name _____ Date _____

1. Subtract.

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

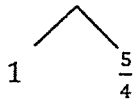


b. $5\frac{2}{4} - \frac{3}{4}$

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

2. Subtract the ones first.

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



b. $4\frac{2}{5} - 1\frac{3}{5}$

c. $5\frac{2}{6} - 3\frac{5}{6}$

d. $9\frac{3}{5} - 2\frac{4}{5}$

3. Solve using any strategy.

a. $7\frac{3}{8} - 2\frac{5}{8}$

b. $6\frac{4}{10} - 3\frac{8}{10}$

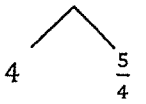
c. $8\frac{3}{12} - 3\frac{8}{12}$

d. $14\frac{2}{50} - 6\frac{43}{50}$

Name _____ Date _____

1. Subtract.

a. $5\frac{1}{4} - \frac{3}{4}$

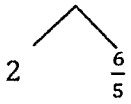


b. $6\frac{3}{8} - \frac{6}{8}$

c. $7\frac{4}{6} - \frac{5}{6}$

2. Subtract the ones first.

a. $4\frac{1}{5} - 1\frac{3}{5} = 3\frac{1}{5} - \frac{3}{5} = 2\frac{3}{5}$



b. $4\frac{3}{6} - 2\frac{5}{6}$

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

d. $13\frac{3}{10} - 8\frac{7}{10}$

3. Solve using any strategy.

a. $7\frac{3}{12} - 4\frac{9}{12}$

b. $9\frac{6}{10} - 5\frac{8}{10}$

c. $17\frac{2}{16} - 9\frac{7}{16}$

d. $12\frac{5}{100} - 8\frac{94}{100}$

Name _____ Date _____

1. Draw and label a tape diagram to show the following are true.

   a. 8 fifths = 4 × (2 fifths) = (4 × 2) fifths

   b. 10 sixths = 5 × (2 sixths) = (5 × 2) sixths

2. Write the expression in unit form to solve.

   a. $7 \times \frac{2}{3}$

   b. $4 \times \frac{2}{4}$

   c. $16 \times \frac{3}{8}$

   d. $6 \times \frac{5}{8}$

3. Solve.

a. $7 \times \frac{4}{9}$

b. $6 \times \frac{3}{5}$

c. $8 \times \frac{3}{4}$

d. $16 \times \frac{3}{8}$

e. $12 \times \frac{7}{10}$

f. $3 \times \frac{54}{100}$

4. Maria needs $\frac{3}{5}$ yard of fabric for each costume. How many yards of fabric does she need for 6 costumes?

Name _____ Date _____

1. Draw and label a tape diagram to show the following are true.
   a. 8 thirds = 4 × (2 thirds) = (4 × 2) thirds

   b. 15 eighths = 3 × (5 eighths) = (3 × 5) eighths

2. Write the expression in unit form to solve.
   a. $10 \times \frac{2}{5}$

   b. $3 \times \frac{5}{6}$

   c. $9 \times \frac{4}{9}$

   d. $7 \times \frac{3}{4}$

3. Solve.

a. $6 \times \frac{3}{4}$

b. $7 \times \frac{5}{8}$

c. $13 \times \frac{2}{3}$

d. $18 \times \frac{2}{3}$

e. $14 \times \frac{7}{10}$

f. $7 \times \frac{14}{100}$

4. Mrs. Smith bought some orange juice. Each member of her family drank $\frac{2}{3}$ cup for breakfast. There are five people in her family. How many cups of orange juice did they drink?

Name _____ Date _____

1. Draw a tape diagram to represent $\frac{3}{4}+\frac{3}{4}+\frac{3}{4}+\frac{3}{4}$.

Write a multiplication expression equal to $\frac{3}{4}+\frac{3}{4}+\frac{3}{4}+\frac{3}{4}$.

2. Draw a tape diagram to represent $\frac{7}{12}+\frac{7}{12}+\frac{7}{12}$.

Write a multiplication expression equal to $\frac{7}{12}+\frac{7}{12}+\frac{7}{12}$.

3. Rewrite each repeated addition problem as a multiplication problem and solve. Express the result as a mixed number. The first one has been started for you.

a. $\frac{7}{5}+\frac{7}{5}+\frac{7}{5}+\frac{7}{5}=4\times\frac{7}{5}=\frac{4\times7}{5}=$

b. $\frac{9}{10}+\frac{9}{10}+\frac{9}{10}$

c. $\frac{11}{12}+\frac{11}{12}+\frac{11}{12}+\frac{11}{12}+\frac{11}{12}$

4. Solve using any method. Express your answers as whole or mixed numbers.

   a. $8 \times \frac{2}{3}$

   b. $12 \times \frac{3}{4}$

   c. $50 \times \frac{4}{5}$

   d. $26 \times \frac{7}{8}$

5. Morgan poured $\frac{9}{10}$ liter of punch into each of 6 bottles. How many liters of punch did she pour in all?

6. A recipe calls for $\frac{3}{4}$ cup rice. How many cups of rice are needed to make the recipe 14 times?

7. A butcher prepared 120 sausages using $\frac{3}{8}$ pound of meat for each. How many pounds did he use in all?

Name _____ Date _____

1. Draw a tape diagram to represent $\frac{2}{3}+\frac{2}{3}+\frac{2}{3}+\frac{2}{3}$.

2. Draw a tape diagram to represent $\frac{7}{8}+\frac{7}{8}+\frac{7}{8}$.

Write a multiplication expression equal to $\frac{2}{3}+\frac{2}{3}+\frac{2}{3}+\frac{2}{3}$.

Write a multiplication expression equal to $\frac{7}{8}+\frac{7}{8}+\frac{7}{8}$.

3. Rewrite each repeated addition problem as a multiplication problem and solve. Express the result as a mixed number. The first one has been completed for you.

a. $\frac{7}{5}+\frac{7}{5}+\frac{7}{5}+\frac{7}{5}=4\times\frac{7}{5}=\frac{4\times7}{5}=\frac{28}{5}=5\frac{3}{5}$

b. $\frac{7}{10}+\frac{7}{10}+\frac{7}{10}$

c. $\frac{5}{12}+\frac{5}{12}+\frac{5}{12}+\frac{5}{12}+\frac{5}{12}+\frac{5}{12}$

d. $\frac{3}{8}+\frac{3}{8}+\frac{3}{8}+\frac{3}{8}+\frac{3}{8}+\frac{3}{8}+\frac{3}{8}+\frac{3}{8}+\frac{3}{8}+\frac{3}{8}+\frac{3}{8}+\frac{3}{8}$

4. Solve using any method. Express your answers as whole or mixed numbers.

a. $7\times\frac{2}{9}$

b. $11\times\frac{2}{3}$

c. $40 \times \frac{2}{6}$

d. $24 \times \frac{5}{6}$

e. $23 \times \frac{3}{5}$

f. $34 \times \frac{2}{8}$

5. Coleton is playing with interlocking blocks that are each $\frac{3}{4}$ inch tall. He makes a tower 17 blocks tall. How tall is his tower in inches?

6. There were 11 players on Mr. Maiorani's softball team. They each ate $\frac{3}{8}$ of a pizza. How many pizzas did they eat?

7. A bricklayer places 12 bricks end to end along the entire outside length of a shed's wall. Each brick is $\frac{3}{4}$ foot long. How many feet long is that wall of the shed?

Name _____ Date _____

1. Draw tape diagrams to show two ways to represent 2 units of $4\frac{2}{3}$.

Write a multiplication expression to match each tape diagram.

2. Solve the following using the distributive property. The first one has been done for you. (As soon as you are ready, you may omit the step that is in line 2.)

a. $3 \times 6\frac{4}{5} = 3 \times \left(6+\frac{4}{5}\right)$ $= (3 \times 6) + \left(3 \times \frac{4}{5}\right)$ $= 18 + \frac{12}{5}$ $= 18 + 2\frac{2}{5}$ $= 20\frac{2}{5}$	b. $2 \times 4\frac{2}{3}$
c. $3 \times 2\frac{5}{8}$	d. $2 \times 4\frac{7}{10}$

e. $3 \times 7\frac{3}{4}$	f. $6 \times 3\frac{1}{2}$
g. $4 \times 9\frac{1}{5}$	h. $5\frac{6}{8} \times 4$

3. For one dance costume, Saisha needs $4\frac{2}{3}$ feet of ribbon. How much ribbon does she need for 5 identical costumes?

Name _____ Date _____

1. Draw tape diagrams to show two ways to represent 3 units of $5\frac{1}{12}$.

Write a multiplication expression to match each tape diagram.

2. Solve the following using the distributive property. The first one has been done for you. (As soon as you are ready, you may omit the step that is in line 2.)

a. $3 \times 6\frac{4}{5} = 3 \times \left(6 + \frac{4}{5}\right)$ $= (3 \times 6) + \left(3 \times \frac{4}{5}\right)$ $= 18 + \frac{12}{5}$ $= 18 + 2\frac{2}{5}$ $= 20\frac{2}{5}$	b. $5 \times 4\frac{1}{6}$
c. $6 \times 2\frac{3}{5}$	d. $2 \times 7\frac{3}{10}$

e. $8 \times 7\frac{1}{4}$	f. $3\frac{3}{8} \times 12$

3. Sara's street is $2\frac{3}{10}$ miles long. She ran the length of the street 6 times. How far did she run?

4. Kelly's new puppy weighed $4\frac{7}{10}$ pounds when she brought him home. Now, he weighs six times as much. How much does he weigh now?

Name _____ Date _____

1. Fill in the unknown factors.

   a. $7 \times 3\frac{4}{5} = (\_\_\_ \times 3) + (\_\_\_ \times \frac{4}{5})$

   b. $3 \times 12\frac{7}{8} = (3 \times \_\_\_) + (3 \times \_\_\_)$

2. Multiply. Use the distributive property.

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

   b. $4\frac{5}{6} \times 9$

   c. $3 \times 8\frac{11}{12}$

   d. $5 \times 20\frac{8}{10}$

e. $25\frac{4}{100} \times 4$

3. The distance around the park is $2\frac{5}{10}$ miles. Cecilia ran around the park 3 times. How far did she run?

4. Windsor the dog ate $4\frac{3}{4}$ snack bones each day for a week. How many bones did Windsor eat that week?

Name _____ Date _____

1. Fill in the unknown factors.

   a. $8 \times 4\frac{4}{7} = (\_\_\_ \times 4) + (\_\_\_ \times \frac{4}{7})$

   b. $9 \times 7\frac{7}{10} = (9 \times \_\_\_) + (9 \times \_\_\_)$

2. Multiply. Use the distributive property.

   a. $6 \times 8\frac{2}{7}$

   b. $7\frac{3}{4} \times 9$

   c. $9 \times 8\frac{7}{9}$

   d. $25\frac{7}{8} \times 3$

e. $4 \times 20\frac{8}{12}$

f. $30\frac{3}{100} \times 12$

3. Brandon is cutting 9 boards for a woodworking project. Each board is $4\frac{5}{8}$ feet long. What is the total length of the boards?

4. Rocky the collie ate $3\frac{1}{4}$ cups of dog food each day for two weeks. How much dog food did Rocky eat in that time?

5. At the class party, each student will be given a container filled with $8\frac{5}{8}$ ounces of juice. There are 25 students in the class. How many ounces of juice does the teacher need to buy?

Name _____ Date _____

Use the RDW process to solve.

1. Tameka ran $2\frac{5}{8}$ miles. Her sister ran twice as far. How far did Tameka's sister run?

2. Natasha's sculpture was $5\frac{3}{16}$ inches tall. Maya's was 4 times as tall. How much shorter was Natasha's sculpture than Maya's?

3. A seamstress needs $1\frac{5}{8}$ yards of fabric to make a child's dress. She needs 3 times as much fabric to make a woman's dress. How many yards of fabric does she need for both dresses?

4. A piece of blue yarn is $5\frac{2}{3}$ yards long. A piece of pink yarn is 5 times as long as the blue yarn. Bailey tied them together with a knot that used $\frac{1}{3}$ yard from each piece of yarn. What is the total length of the yarn tied together?

5. A truck driver drove $35\frac{2}{10}$ miles before he stopped for breakfast. He then drove 5 times as far before he stopped for lunch. How far did he drive that day before his lunch break?

6. Mr. Washington's motorcycle needs $5\frac{5}{10}$ gallons of gas to fill the tank. His van needs 5 times as much gas to fill it. If Mr. Washington pays $3 per gallon for gas, how much will it cost him to fill both the motorcycle and the van?

Name _____ Date _____

Use the RDW process to solve.

1. Ground turkey is sold in packages of $2\frac{1}{2}$ pounds. Dawn bought eight times as much turkey that is sold in 1 package for her son's birthday party. How many pounds of ground turkey did Dawn buy?

2. Trevor's stack of books is $7\frac{7}{8}$ inches tall. Rick's stack is 3 times as tall. What is the difference in the heights of their stacks of books?

3. It takes $8\frac{3}{4}$ yards of fabric to make one quilt. Gail needs three times as much fabric to make three quilts. She already has two yards of fabric. How many more yards of fabric does Gail need to buy in order to make three quilts?

4. Carol made punch. She used $12\frac{3}{8}$ cups of juice and then added three times as much ginger ale. Then, she added 1 cup of lemonade. How many cups of punch did her recipe make?

5. Brandon drove $72\frac{7}{10}$ miles on Monday. He drove 3 times as far on Tuesday. How far did he drive in the two days?

6. Mrs. Reiser used $9\frac{8}{10}$ gallons of gas this week. Mr. Reiser used five times as much gas as Mrs. Reiser used this week. If Mr. Reiser pays $3 for each gallon of gas, how much did Mr. Reiser pay for gas this week?

Name _____ Date _____

1. The chart to the right shows the height of some football players.

   a. Use the data to create a line plot at the bottom of this page and to answer the questions below.

   b. What is the difference in height of the tallest and shortest players?

   c. Player I and Player B have a combined height that is $1\frac{1}{8}$ feet taller than a school bus. What is the height of a school bus?

Player	Height (in feet)
A	$6\frac{1}{4}$
B	$5\frac{7}{8}$
C	$6\frac{1}{2}$
D	$6\frac{1}{4}$
E	$6\frac{2}{8}$
F	$5\frac{7}{8}$
G	$6\frac{1}{8}$
H	$6\frac{5}{8}$
I	$5\frac{6}{8}$
J	$6\frac{1}{8}$

2. One of the players on the team is now 4 times as tall as he was at birth, when he measured $1\frac{5}{8}$ feet. Who is the player?

3. Six of the players on the team weigh over 300 pounds. Doctors recommend that players of this weight drink at least $3\frac{3}{4}$ quarts of water each day. At least how much water should be consumed per day by all 6 players?

4. Nine of the players on the team weigh about 200 pounds. Doctors recommend that people of this weight each eat about $3\frac{7}{10}$ grams of carbohydrates per pound each day. About how many combined grams of carbohydrates should these 9 players eat per pound each day?

Name _____ Date _____

The chart to the right shows the total monthly rainfall for a city.

1. Use the data to create a line plot at the bottom of this page and to answer the following questions.

Month	Rainfall (in inches)
January	$2\frac{2}{8}$
February	$1\frac{3}{8}$
March	$2\frac{3}{8}$
April	$2\frac{5}{8}$
May	$4\frac{1}{4}$
June	$2\frac{1}{4}$
July	$3\frac{7}{8}$
August	$3\frac{1}{4}$
September	$1\frac{5}{8}$
October	$3\frac{2}{8}$
November	$1\frac{3}{4}$
December	$1\frac{5}{8}$