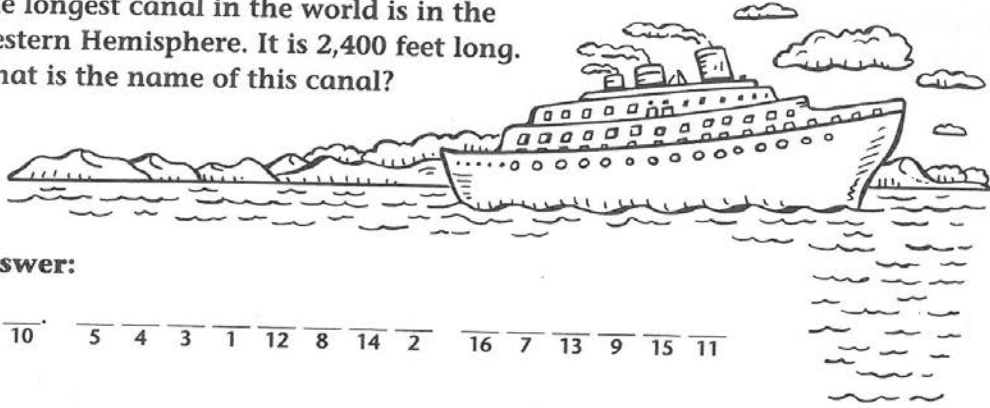


Name _____ Date _____

Ships Ahoy!

Writing Equivalent Fractions

The longest canal in the world is in the Western Hemisphere. It is 2,400 feet long. What is the name of this canal?



Answer:

6 10 5 4 3 1 12 8 14 2 16 7 13 9 15 11

To answer the question, match each fraction with an equivalent fraction in the Answer Box. Then write the letter of each equivalent fraction in the space above its problem number.

1 $\frac{9}{10} =$ _____

9 $\frac{3}{8} =$ _____

2 $\frac{4}{5} =$ _____

10 $\frac{6}{7} =$ _____

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

11 $\frac{5}{6} =$ _____

4 $\frac{4}{9} =$ _____

12 $\frac{5}{7} =$ _____

5 $\frac{3}{4} =$ _____

13 $\frac{5}{12} =$ _____

6 $\frac{2}{5} =$ _____

14 $\frac{1}{2} =$ _____

7 $\frac{5}{8} =$ _____

15 $\frac{7}{10} =$ _____

8 $\frac{1}{6} =$ _____

16 $\frac{7}{8} =$ _____

Answer Box	
L. $\frac{15}{20}$	A. $\frac{12}{27}$
W. $\frac{12}{32}$	Y. $\frac{15}{18}$
T. $\frac{18}{21}$	N. $\frac{3}{18}$
E. $\frac{15}{24}$	S. $\frac{21}{24}$
W. $\frac{6}{9}$	E. $\frac{12}{15}$
A. $\frac{21}{30}$	E. $\frac{10}{14}$
A. $\frac{10}{24}$	S. $\frac{10}{25}$
R. $\frac{18}{20}$	C. $\frac{50}{100}$

Home Sweet Home

Adding Mixed Numbers (Unlike Denominators)

Scientists estimate that Earth may be home to up to 30 million different kinds of plants and animals. What word describes this amazing variety of life on our planet?

Answer:

$9\frac{7}{24}$ $10\frac{7}{18}$ $7\frac{4}{15}$ $14\frac{1}{4}$ $10\frac{7}{18}$ $12\frac{2}{9}$ $7\frac{5}{6}$ $12\frac{3}{10}$ $9\frac{1}{3}$ $10\frac{7}{18}$ $9\frac{9}{14}$ $11\frac{1}{20}$

To answer the question, add the mixed numbers. Be sure your answers are simplified. Write the letter of the problem in the space above its answer. (One letter will be used more than once. Some will not be used.)



$$\begin{array}{r} \text{E. } 4\frac{1}{3} \\ + 3\frac{1}{2} \\ \hline \end{array}$$

$$\begin{array}{r} \text{V. } 7\frac{5}{9} \\ + 4\frac{2}{3} \\ \hline \end{array}$$

$$\begin{array}{r} \text{I. } 2\frac{5}{9} \\ + 7\frac{5}{6} \\ \hline \end{array}$$

$$\begin{array}{r} \text{S. } 3\frac{1}{2} \\ + 5\frac{5}{6} \\ \hline \end{array}$$

$$\begin{array}{r} \text{B. } 6\frac{2}{3} \\ + 2\frac{5}{8} \\ \hline \end{array}$$

$$\begin{array}{r} \text{O. } 4\frac{3}{5} \\ + 2\frac{2}{3} \\ \hline \end{array}$$

$$\begin{array}{r} \text{Y. } 1\frac{3}{4} \\ + 9\frac{3}{10} \\ \hline \end{array}$$

$$\begin{array}{r} \text{J. } 5\frac{5}{6} \\ + 2\frac{1}{3} \\ \hline \end{array}$$

$$\begin{array}{r} \text{R. } 4\frac{1}{2} \\ + 7\frac{4}{5} \\ \hline \end{array}$$

$$\begin{array}{r} \text{T. } 3\frac{3}{7} \\ + 6\frac{3}{14} \\ \hline \end{array}$$

$$\begin{array}{r} \text{M. } 7\frac{5}{8} \\ + 3\frac{1}{2} \\ \hline \end{array}$$

$$\begin{array}{r} \text{D. } 4\frac{7}{12} \\ + 9\frac{2}{3} \\ \hline \end{array}$$

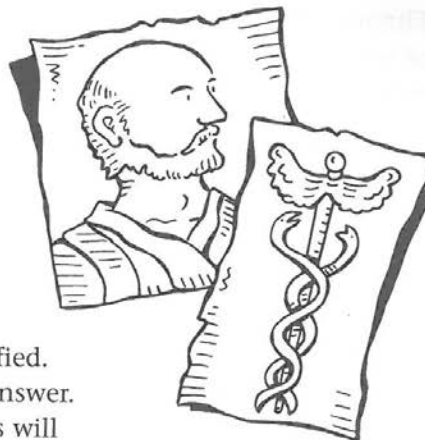
Name _____ Date _____

Ancient Doctor

Subtracting Mixed Numbers (Unlike Denominators)

This man studied diseases and the human body nearly 2,500 years ago. He is often called the "father of medicine." Who was this man?

Answer:



$5\frac{5}{12}$ $5\frac{5}{8}$ $4\frac{1}{3}$ $4\frac{1}{3}$ $4\frac{1}{24}$ $3\frac{3}{4}$ $3\frac{1}{10}$ $4\frac{7}{8}$ $5\frac{3}{10}$ $5\frac{7}{8}$ $4\frac{7}{9}$

To answer the question, subtract the mixed numbers. Regroup if necessary and be sure all answers are simplified. Write the letter of the problem in the space above its answer. (Some letters will be used more than once. Some letters will not be used.)

R. $9\frac{4}{5}$
 $- 6\frac{7}{10}$

E. $9\frac{5}{8}$
 $- 3\frac{3}{4}$

H. $8\frac{1}{6}$
 $- 2\frac{3}{4}$

C. $6\frac{5}{12}$
 $- 2\frac{2}{3}$

P. $11\frac{1}{5}$
 $- 6\frac{13}{15}$

O. $12\frac{2}{3}$
 $- 8\frac{5}{8}$

D. $8\frac{1}{2}$
 $- 3\frac{5}{6}$

N. 7
 $- 4\frac{3}{4}$

S. $7\frac{1}{3}$
 $- 2\frac{5}{9}$

T. $14\frac{1}{2}$
 $- 9\frac{1}{5}$

A. $7\frac{3}{8}$
 $- 2\frac{1}{2}$

I. $11\frac{1}{10}$
 $- 5\frac{4}{15}$

Name _____

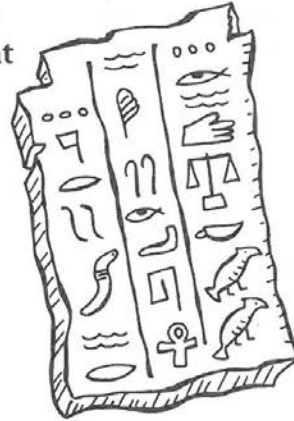
Date _____

Picture This

Adding and
Subtracting Simple
Fractions and Mixed
Numbers (Review)

Throughout history people have invented different types of writing. Some ancient people used pictures to represent words or sounds. What is this type of writing called?

Answer:



$$10\frac{7}{15} \quad 2\frac{7}{8} \quad \frac{29}{30} \quad \frac{1}{2} \quad 3\frac{5}{12} \quad 8\frac{5}{24} \quad \frac{3}{20} \quad 9\frac{3}{8} \quad 4\frac{11}{24} \quad 10\frac{7}{15} \quad 2\frac{7}{8} \quad 5\frac{3}{8} \quad \frac{2}{3}$$

To answer the question, add or subtract the simple fractions and mixed numbers. Be sure your answers are simplified. Write the letter of the problem in the space above its answer. (Some letters will be used more than once. One letter will not be used.)

R.
$$\begin{array}{r} \frac{1}{10} \\ + \frac{2}{5} \\ \hline \end{array}$$

O.
$$\begin{array}{r} 6\frac{2}{3} \\ - 3\frac{1}{4} \\ \hline \end{array}$$

H.
$$\begin{array}{r} 6\frac{4}{5} \\ + 3\frac{2}{3} \\ \hline \end{array}$$

C.
$$\begin{array}{r} 3\frac{1}{8} \\ + 2\frac{1}{4} \\ \hline \end{array}$$

P.
$$\begin{array}{r} 9\frac{1}{3} \\ - 4\frac{7}{8} \\ \hline \end{array}$$

I.
$$\begin{array}{r} \frac{7}{8} \\ - \frac{2}{5} \\ \hline \end{array}$$

I.
$$\begin{array}{r} 7\frac{3}{8} \\ - 4\frac{1}{2} \\ \hline \end{array}$$

E.
$$\begin{array}{r} \frac{1}{6} \\ + \frac{4}{5} \\ \hline \end{array}$$

Y.
$$\begin{array}{r} 7\frac{3}{4} \\ + 1\frac{5}{8} \\ \hline \end{array}$$

L.
$$\begin{array}{r} \frac{2}{5} \\ - \frac{1}{4} \\ \hline \end{array}$$

S.
$$\begin{array}{r} 7 \\ - 6\frac{1}{3} \\ \hline \end{array}$$

G.
$$\begin{array}{r} 4\frac{5}{6} \\ + 3\frac{3}{8} \\ \hline \end{array}$$

A Long Subway

Adding and Subtracting Fractions and Mixed Numbers (Word Problems)

With about 244 miles of track, this subway system is the longest in the world. What is the name of this subway system?

Answer:

_____ $\frac{1}{8}$ _____ $3\frac{5}{6}$ _____ $1\frac{1}{4}$ _____ $\frac{1}{8}$ _____ $8\frac{1}{3}$ _____ $2\frac{1}{8}$



To answer the question, solve each problem and write your answer in the space provided. Be sure your answers are simplified. Write the letters that follow each answer in the space above the answer. After filling in the correct letters, you will have to reverse the letters. (Not all sets of letters will be used, but one set of letters will be used twice.)

1 Last night Laura worked on her homework for $\frac{1}{2}$ hour and then stopped to eat dinner. After dinner she worked on homework another $\frac{3}{4}$ hour. How long did she spend on homework last night?

_____ **G R E**

2 Mandy babysat for $3\frac{1}{2}$ hours on Friday night and $4\frac{5}{8}$ hours on Saturday. How many hours did she babysit this weekend?

_____ **N O D**

3 The hiking trail in Harris Valley Park is $2\frac{3}{8}$ miles long. The hiking trail in Weaver's Pond Park is $4\frac{1}{2}$ miles long. How much longer is the trail in Weaver's Pond Park than the trail in Harris Valley Park?

_____ **N O L**

4 When David went fishing with his father, he caught a $2\frac{1}{2}$ -pound bass. His father caught a $3\frac{7}{8}$ -pound bass. How much more did the bass David's father caught weigh?

_____ **A P**

5 Jamal jogged $1\frac{1}{2}$ miles on Tuesday and $2\frac{1}{3}$ miles on Wednesday. What is the total distance he jogged on these two days?

_____ **O R**

6 On Saturday Jamal jogged $2\frac{1}{2}$ miles and on Sunday he jogged $3\frac{1}{8}$ miles. Tom jogged $5\frac{3}{4}$ miles on Sunday. Which boy jogged farther this weekend? By how much? (Write only the distance in the space provided for your answer.)

_____ **D N U**

Name _____ Date _____

A Traffic Stopper!

Multiplying
Mixed Numbers

In response to growing traffic problems, this African American invented the automatic traffic signal in 1923. What was this man's name?

Answer:

$6\frac{1}{2}$ $10\frac{1}{2}$ $8\frac{1}{3}$ $8\frac{1}{3}$ $5\frac{1}{4}$ $9\frac{1}{2}$ $10\frac{1}{2}$ $3\frac{1}{2}$ $2\frac{1}{4}$ $8\frac{1}{3}$ $6\frac{1}{2}$ $10\frac{1}{2}$ $3\frac{8}{9}$

To answer the question, multiply the mixed numbers. Be sure each answer is simplified. Write the letter of the problem in the space above its answer. (Some letters will be used more than once. Some letters will not be used.)



N. $2\frac{1}{3} \times 1\frac{2}{3} =$

T. $4 \times 2\frac{3}{8} =$

R. $3\frac{3}{4} \times 2\frac{2}{9} =$

S. $4\frac{2}{5} \times 3\frac{3}{4} =$

L. $1\frac{1}{4} \times 1\frac{2}{5} =$

A. $2\frac{1}{3} \times 4\frac{1}{2} =$

G. $3\frac{1}{4} \times 2 =$

H. $1\frac{1}{3} \times 1\frac{1}{2} =$

M. $1\frac{1}{2} \times 2\frac{1}{3} =$

O. $1\frac{1}{2} \times 1\frac{1}{2} =$

J. $3\frac{1}{3} \times 1\frac{3}{4} =$

E. $4\frac{3}{8} \times 1\frac{1}{5} =$

Name _____ Date _____

A Famous Toy

Dividing
Mixed Numbers

In 1945, this man invented the Slinky. In 2000, the Slinky, was placed in the National Toy Hall of Fame in Salem, Oregon. Who invented this famous toy?

Answer:

$1\frac{1}{4}$ $3\frac{1}{6}$ $2\frac{4}{9}$ $2\frac{5}{7}$ $2\frac{3}{4}$ $1\frac{1}{4}$ $1\frac{3}{4}$ $2\frac{3}{20}$ $2\frac{3}{4}$ $1\frac{3}{7}$ $2\frac{1}{2}$ $4\frac{2}{3}$

To answer the question, divide the mixed numbers. Be sure your answers are simplified. Write the letter of the problem in the space above its answer. (Some letters will be used more than once. Some letters will not be used.)



H. $9\frac{1}{2} \div 3\frac{1}{2} =$

M. $2\frac{1}{2} \div 1\frac{3}{4} =$

S. $17\frac{1}{2} \div 3\frac{3}{4} =$

I. $7\frac{1}{3} \div 2\frac{2}{5} =$

D. $5\frac{5}{6} \div 3\frac{1}{3} =$

E. $6\frac{1}{4} \div 2\frac{1}{2} =$

Y. $11\frac{1}{4} \div 1\frac{4}{5} =$

I. $6\frac{1}{3} \div 2 =$

J. $5\frac{3}{8} \div 2\frac{1}{2} =$

C. $5\frac{1}{2} \div 2\frac{1}{4} =$

A. $3\frac{2}{3} \div 1\frac{1}{3} =$

R. $6\frac{2}{3} \div 5\frac{1}{3} =$

Compute This

Multiplying
and Dividing
Mixed Numbers
(Word Problems)

The computers we use today are much, much faster than the first electronic computer, which was built in 1945. While that computer could do 5,000 calculations per second, an average computer today can do 500 million. That first computer was a lot bigger, too, weighing more than 30 tons and filling an 1,800-square-foot room. What was the name given to the first electronic computer?



Answer:
 33 8 $\frac{3}{4}$ 5 2 $\frac{1}{3}$ 16

To answer the question, solve each problem. Write your answers in the spaces provided. Be sure your answers are simplified. Then write the letter that follows each answer in the space above the answer. (Not all letters will be used.)

1 A box of cereal contains 20 ounces. How many $1\frac{1}{4}$ -ounce servings are in the box?

_____ C

2 For exercise, Mr. Harris walked $1\frac{3}{4}$ miles 5 times last week. How many miles did he walk in all?

_____ N

3 Marielle volunteered to help make costumes for her school play. She was given the task of cutting a roll of ribbon into $5\frac{1}{3}$ -inch lengths. These small ribbons would then be made into bows. How many bows could be made from a roll of ribbon 192 inches long?

_____ S

4 Jason had $1\frac{3}{4}$ cups of flour, but the recipe for a cake he was baking called for $1\frac{1}{3}$ times this amount. How many cups of flour did the recipe require?

_____ A

5 Cassie jogs $5\frac{1}{2}$ miles each week. How many miles does she jog in $1\frac{1}{2}$ months?

_____ E

6 Todd and three of his football player friends have big appetites. They bought $2\frac{1}{2}$ pizzas. Each pizza was cut into 8 equal slices. How many slices did each boy eat if the boys ate the same number of slices, and they ate all of the pies?

_____ I

Name _____ Date _____

What's on TV?

Using Four Operations with Fractions and Mixed Numbers (Review)

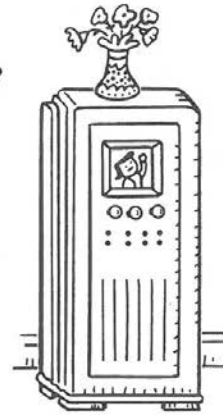
While many people contributed to the invention of the television, most authorities consider this radio engineer to be the principal inventor of TV. What was this man's name?

Answer:

$$6\frac{2}{3} \quad 6 \quad \frac{17}{24} \quad \frac{6}{7} \quad \frac{5}{6} \quad 10\frac{1}{2} \quad \frac{3}{5} \quad 3\frac{3}{4} \quad \frac{6}{7} \quad \frac{5}{6} \quad 1\frac{1}{15}$$

$$12 \quad \frac{3}{5} \quad 1\frac{1}{15} \quad 6\frac{1}{24} \quad 4\frac{7}{8} \quad \frac{1}{2} \quad \frac{5}{6} \quad 1\frac{1}{15} \quad 10\frac{1}{2} \quad 6$$

To answer the question, perform the indicated operation. Be sure your answers are simplified. Write the letter of the problem in the space above its answer. (Some letters will be used more than once. One letter will not be used.)



I.
$$\begin{array}{r} \frac{1}{12} \\ + \frac{5}{8} \\ \hline \end{array}$$

N.
$$\begin{array}{r} 9\frac{7}{8} \\ - 3\frac{5}{6} \\ \hline \end{array}$$

A. $\frac{9}{10} \times \frac{2}{3} =$

P. $2\frac{2}{9} \times 3 =$

M.
$$\begin{array}{r} 2\frac{3}{4} \\ + 2\frac{1}{6} \\ \hline \end{array}$$

T.
$$\begin{array}{r} 3\frac{2}{3} \\ + 6\frac{5}{6} \\ \hline \end{array}$$

L. $\frac{3}{5} \div \frac{7}{10} =$

F. $3\frac{3}{4} \times 3\frac{1}{5} =$

W.
$$\begin{array}{r} \frac{4}{5} \\ - \frac{3}{10} \\ \hline \end{array}$$

S.
$$\begin{array}{r} 7\frac{3}{8} \\ - 2\frac{1}{2} \\ \hline \end{array}$$

H. $1 \div \frac{1}{6} =$

O. $4\frac{2}{3} \div 5\frac{3}{5} =$

R. $2\frac{2}{5} \div 2\frac{1}{4} =$

Y. $3\frac{1}{8} \times 1\frac{1}{5} =$