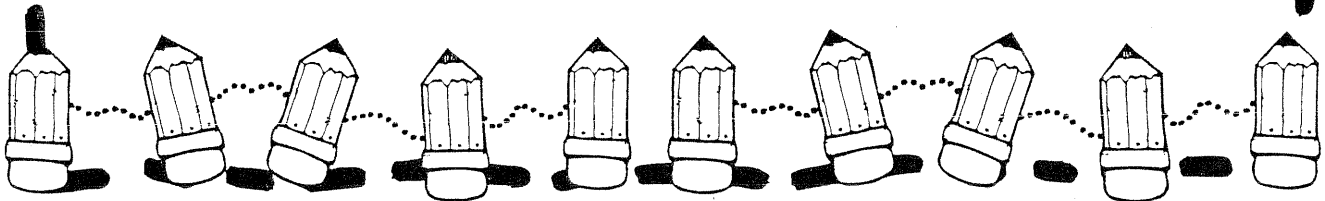


Dear Future Sixth Graders and Parents,

I am very proud of all you accomplished this year and am excited to continue our journey together next year! Regular math practice during summer will benefit you tremendously as we begin 6th grade. Practice your facts, play games, and keep your brain active! I have given you list of website and apps that will help with this. Attached is your summer math packet. By completing these problems, you will continue to practice concepts you have already learned and sharpen your basic skills. At the beginning of the packet you will find "help notes" to refresh your memory as needed. PLEASE DO ONE PAGE PER WEEK. You may not use a calculator. Complete your work on a separate paper, number each problem, and attach this to your packet. This is due the first day of school, August 20th, 2013.

The upcoming year is going to be full of learning and fun. One of our big adventures is a 5 day/4 night trip to science camp at Sly Park. Our trip is scheduled for October 7th-11th. The cost for this trip is approximately \$260 per child. I will be collecting a deposit for half the amount, \$130, at the beginning of the school year. Students, I encourage you to earn money this summer to contribute to your trip. This is an exciting opportunity that you should take some responsibility for. You can find more information about Sly Park at www.scoe.net/slypark. I am looking forward to sharing this adventure with you!

Sincerely,
Mrs. Green



Resources for Math Facts Practice

Websites

- Abcya.com
- Arcademics.com
- Fun4thebrain.com
- Funbrain.com/math
- Mathfactcafe.com
- Madpractice.com

Apps

- Bugs and Numbers from LittleBit Studio. The illustrations are just breathtaking and will capture a child's attention right from the beginning. Pick from eighteen different locations, such as the pizzeria, train station, garage or theater, as well as, the option to have multiple users. Unlike other apps that may repeat the same thing over and over, this app is fresh and new. Whimsical music in each of the rooms adds to the fun. This game has a much bigger range in math skills than their previous apps. Try early math skills such as matching numbers and shapes, and move all the way through fractions. Even within each game, the levels progress and become harder and harder.
- Squeebles Maths Bingo, by Key Stage Fun – Math Monster is back and has once again stolen the ingredients. Meet new Squeebles with wacky personalities and try to make the best ice cream. Help Ruby earn ice cream cones by solving math problems that are either addition, subtraction, multiplication, division or mixed problems. Earn a customer by solving the problems quickly and accurately.
- Squeebles Fractions has made learning easy with its wonderful quirky characters, but the mean Math Monster is once again stealing tokens. Earn tokens to help the Squeebles make special cakes. Try Tricky Pairs where a child has to determine equivalent fractions. Feed those hungry Squeebles with Piece of Cake. Super Sums requires adding fractions.
- Squeebles Addition & Subtraction
- Times Tables: Squeebles for iPad
- Math Drills, by Instant Interactive, Math Drills is an app every child needs at some point in their schooling, to easily master basic math facts in the four operations. Math Drills allows students to practice and monitor their growth and continue to build a solid foundation. All that follows will depend upon the strength of that base.

- Operation Math Code Squad, by Spinlight Studio, is a brilliant multiplayer game for keeping kids current on all four math operations by jointly beating the clock. Code Squad is not for the faint of heart, and it does take teamwork and quick wit to reach all five levels of play. The premise behind Code Squad is to reach each level of difficulty through collaboration and cooperation.
- MultiFlow: Times Tables Reimagined, by Dactyl Applications, is a remarkable app that keeps kids engaged and striving to do better, over and over again. Best part, it can actually adjust the questions as you go, the ones you get wrong will be the ones you get again. MultiFlow scales the difficulty of the questions based on your ability to answer questions and it adapts and tracks progress. Let's face it, some skills just have to be learned, and multiplication is one of them. Some children struggle more than others so when you find something that really works, that the kids like, ask to play, and want to know how they can get on their devices at home, you have a winner!
- Times Tables Pro by frogameleon Ltd – Practice and test multiplication tables in a sleek, but simple app form. Bot is a 21st century buddy, whom you will be competing against. What we liked from the get-go were all the options of multiplication tables kids could practice, learn, test, and review... all with a pace that suits the user! The menu gives so many choices – how many problems to work on, timed with three speeds or no timer, multiple choice or keyboard answers. Every aspect can be customized to the individual player's needs. One of the best features is the 'Review Bank'. Any gaps in specific knowledge of a problem can be easily brought to the forefront and be addressed. What really sets this app apart is the sophisticated, no-nonsense, mature approach. Even an adult would feel comfortable with the polished presentation.
- Math Evolve: A Fun Math Game, by InterAction Education and Zephyr Games, This app introduces a revolutionary "video-like" gaming app for practicing math facts. One student called it, "The Call of Duty," of math games. Adam Coccari, teacher and creator of Math Evolve, sums it up best when he says, "Achieving success in all levels of math starts with having a solid foundation in addition, subtraction, multiplication, and division." Mastering these facts takes time and lots of practice, Math Evolve has taken care of all of that in an enormously engaging format. (

Help Notes

Decimal Numbers

Rounding Decimals

To round a decimal, first underline the digit to be rounded. Then look at the digit to the right of the place being rounded.

- If the digit is 4 or less, the underlined digit remains the same.
- If the digit is 5 or greater, add 1 to the underlined digit.

EXAMPLE 1 Round 6.58 to the nearest tenth.

Underline the digit to be rounded.	Look at the digit to the right of the underlined digit.	Since the digit to the right is 8, add one to the underlined digit.
6. <u>5</u> 8	6.58	6.6

To the nearest tenth, 6.58 rounds to 6.6.

EXAMPLE 2 Round 86.943 to the nearest hundredth.

Underline the digit to be rounded.	Look at the digit to the right of the underlined digit.	Since the digit is 3 and $3 < 5$, the digit 4 remains the same.
86.9 <u>4</u> 3	86.943	86.94

To the nearest hundredth, 86.943 rounds to 86.94.

Adding and Subtracting Decimals

To add or subtract decimals, line up the decimal points then add or subtract digits in the same place-value position. Estimate first so you know if your answer is reasonable.

EXAMPLE 1 Find the sum of $61.32 + 8.26$.

First, estimate the sum using front-end estimation.

$$61.32 + 8.26 \rightarrow 61 + 8 = 69$$

$$\begin{array}{r} 61.32 \\ + 8.26 \\ \hline 69.58 \end{array}$$

Since the estimate is close, the answer is reasonable.

EXAMPLE 2 Find $2.65 - 0.2$.

$$\text{Estimate: } 2.65 - 0.2 \rightarrow 3 - 0 = 3$$

$$\begin{array}{r} 2.65 \\ - 0.20 \\ \hline 2.45 \end{array} \quad \text{Annex a zero.}$$

Since the estimate is close, the answer is reasonable.

EXAMPLE 3 $25 - 15.25$ Estimate $25 - 15 = 10$

$$\begin{array}{r} 25.00 \\ - 15.25 \\ \hline 9.75 \end{array}$$

Annex two zeros to align the columns.
Compare to the estimate.

Multiplying Decimals by Whole Numbers

When you multiply a decimal by a whole number, you multiply the numbers as if you were multiplying all whole numbers. Then you use estimation or you count the number of decimal places to decide where to place the decimal point. If there are not enough decimal places in the product, annex zeros to the left.

EXAMPLE 1 Find 6.25×5 .

$$\begin{array}{r} 6.25 \\ \times 5 \\ \hline 31.25 \end{array}$$

There are two places to the right of the decimal point.

Count the same number of decimal places from right to left.

EXAMPLE 2 Find 3×0.0047 .

$$\begin{array}{r} 0.0047 \\ \times 3 \\ \hline 0.0141 \end{array}$$

There are four decimal places.

Annex a zero on the left of 141 to make four decimal places.

Multiplying Decimals

When you multiply a decimal by a decimal, multiply the numbers as if you were multiplying all whole numbers. To decide where to place the decimal point, find the sum of the number of decimal places in each factor. The product has the same number of decimal places.

EXAMPLE 1 Find 5.2×6.13 .

Estimate: 5×6 or 30

$$\begin{array}{r} 5.2 \\ \times 6.13 \\ \hline 156 \\ 52 \\ 312 \\ \hline 31.876 \end{array}$$

one decimal place
two decimal places
three decimal places

The product is 31.876. Compared to the estimate, the product is reasonable.

Dividing Decimals by Whole Numbers

When you divide a decimal by a whole number, place the decimal point directly above the decimal point in the dividend. Then divide as with whole numbers.

EXAMPLE 1

Find $5.22 \div 12$.

Estimate $5 \div 10 = 0.5$

$$\begin{array}{r} 0.435 \\ 12 \overline{)5.220} \\ \underline{-48} \\ 42 \\ \underline{-36} \\ 60 \\ \underline{-60} \\ 0 \end{array}$$

Place the decimal point.

Annex a zero and continue dividing.

$5.22 \div 12 = 0.435$ Compared to the estimate, the quotient is reasonable.

Dividing by Decimals

When you divide a decimal by a decimal, multiply both the divisor and the dividend by the same power of ten. Then divide as with whole numbers.

EXAMPLE 1 Find $10.14 \div 5.2$.

Estimate: $10 \div 5 = 2$

Multiply by 10 to make a whole number.

$$5.2 \overline{)10.14}$$

Multiply by the same number, 10.

$$\begin{array}{r} 1.95 \\ 52 \overline{)101.40} \\ \underline{-52} \\ 494 \\ \underline{-468} \\ 260 \\ \underline{-260} \\ 0 \end{array}$$

Place the decimal point.

Divide as with whole numbers.

Annex a zero to continue.

Compare to the estimate.

10.14 divided by 5.2 is 1.95.

Check: $1.95 \times 5.2 = 10.14 \checkmark$

Fractions

Simplifying Fractions

Fractions that name the same number are **equivalent fractions**. To find equivalent fractions, you can multiply or divide the numerator and denominator by the same nonzero number.

EXAMPLE 1 Replace the $\bullet$ with a number so that $\frac{1}{2} = \frac{\bullet}{10}$.

Since $2 \times 5 = 10$, multiply the numerator and denominator by 5.

$$\begin{array}{ccc} \begin{array}{c} \times 5 \\ \frac{1}{2} = \frac{\bullet}{10} \\ \times 5 \end{array} & \begin{array}{c} \times 5 \\ \frac{1}{2} = \frac{5}{10} \\ \times 5 \end{array} \end{array}$$

When the GCF of the numerator and denominator is 1, the fraction is in simplest form. To write a fraction in simplest form, you can divide the numerator and denominator by the GCF.

EXAMPLE 2 Write $\frac{12}{30}$ in simplest form.

The GCF of 12 and 30 is 6.

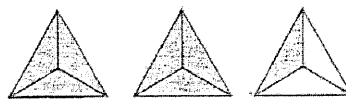
$$\begin{array}{ccc} \begin{array}{c} \div 6 \\ \frac{12}{30} = \frac{2}{5} \\ \div 6 \end{array} & \text{Divide the numerator and denominator by the GCF, 6.} \end{array}$$

Mixed Numbers and Improper Fractions

The number $2\frac{2}{3}$ is a mixed number. A **mixed number** indicates the sum of a whole number and a fraction. The number $\frac{5}{3}$ is an improper fraction. **Improper fractions** are fractions greater than or equal to 1. Mixed numbers can be written as mixed numbers or as improper fractions.

EXAMPLE 1 Draw a model for $2\frac{1}{3}$. Then write $2\frac{1}{3}$ as an improper fraction.

The model shows there are seven $\frac{1}{3}$ s.



You can also multiply the denominator and the whole number. Then add the numerator.

$$2\frac{1}{3} \rightarrow \frac{(2 \times 3) + 1}{3} = \frac{7}{3}$$

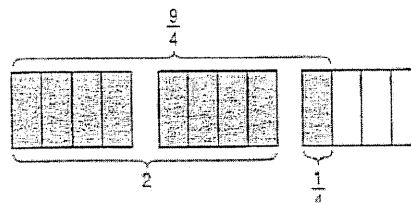
So $2\frac{1}{3}$ can be written as $\frac{7}{3}$.

EXAMPLE 2 Write $\frac{9}{4}$ as a mixed number.

Divide 9 by 4. Use the remainder as the numerator of the fraction.

$$\begin{array}{r} 2\frac{1}{4} \\ 4 \overline{)9} \\ \underline{-8} \\ 1 \end{array}$$

So, $\frac{9}{4}$ can be written as $2\frac{1}{4}$.



Adding and Subtracting Fractions

Like fractions are fractions that have the same denominator. To add or subtract like fractions, add or subtract the numerators and write the result over the denominator.

Simplify if necessary.

To add or subtract *unlike fractions*, rename the fractions with a least common denominator. Then add or subtract as with like fractions.

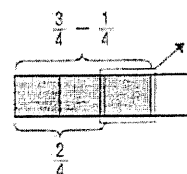
EXAMPLE 1 Subtract $\frac{3}{4} - \frac{1}{4}$. Write in simplest form.

$$\begin{aligned}\frac{3}{4} - \frac{1}{4} &= \frac{3-1}{4} \\ &= \frac{2}{4} \\ &= \frac{1}{2}\end{aligned}$$

Subtract the numerators.

Write the difference over the denominator.

Simplify.



EXAMPLE 2 Add $\frac{2}{3} + \frac{1}{12}$. Write in simplest form.

The least common denominator of 3 and 12 is 12.

$$\frac{2}{3} = \frac{2 \times 4}{3 \times 4} = \frac{8}{12}$$

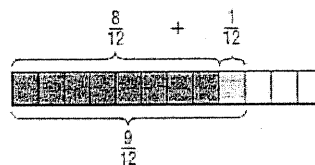
Rename $\frac{2}{3}$ using the LCD.

$$\frac{2}{3} \rightarrow \frac{8}{12}$$

$$+ \frac{1}{12} \rightarrow + \frac{1}{12}$$

$$\frac{9}{12} \text{ or } \frac{3}{4}$$

Add the numerators and simplify.



Adding and Subtracting Mixed Numbers

To add or subtract mixed numbers:

1. Add or subtract the fractions. Rename using the LCD if necessary.
2. Add or subtract the whole numbers.
3. Simplify if necessary.

EXAMPLE 1 Find $14\frac{1}{2} + 18\frac{2}{3}$.

$$14\frac{1}{2} \rightarrow 14\frac{3}{6}$$

Rename the fractions.

$$+ 18\frac{2}{3} \rightarrow + 18\frac{4}{6}$$

Add the whole numbers and add the fractions.

$$32\frac{7}{6} \text{ or } 33\frac{1}{6}$$

Simplify.

EXAMPLE 2 Find $21 - 12\frac{5}{8}$.

$$21 \rightarrow 20\frac{8}{8}$$

Rename 21 as $20\frac{8}{8}$.

$$- 12\frac{5}{8} \rightarrow - 12\frac{5}{8}$$

First subtract the whole numbers and then the fractions.

$$8\frac{3}{8}$$

Name: _____

Practice 1

Solve.

① $9 + 6 =$ _____

② $9 \times 6 =$ _____

③ $54 \div 6 =$ _____

④ $32 + 18 =$ _____

⑤ $32 - 18 =$ _____

⑥ $32 \times 18 =$ _____

⑦ $409 \div 8 =$ _____

⑧ $100 \times 52 =$ _____

⑨ $703 - 458 =$ _____

⑩ $92 \times 47 =$ _____

⑪ $286 + 454 =$ _____

⑫ $4904 \div 8 =$ _____

⑬ $892 + 79 + 350 =$ _____

⑭ $500 \times 40 =$ _____

⑮ $800 - 238 =$ _____

⑯ $413 \times 725 =$ _____

Solve.

⑰ $6.7 - 3.15 =$ _____

⑱ $2.75 + 4.36 =$ _____

⑲ $230 \times 4.5 =$ _____

⑳ $5.34 - 2.7 =$ _____

Multiply or divide.

㉑ $8.02 \times 1000 =$ _____

㉒ $41.35 \div 100 =$ _____

㉓ $100 \times 65.03 =$ _____

㉔ $5.94 \div 100 =$ _____



Solve these problems.

- ㉕ Greg rode 24.2 miles along a bicycle trail. If his odometer showed 132.9 miles when he began his ride, what mileage did the odometer show at the end of his ride?

- ㉖ A swimming pool is twice as long as it is wide. If the width is 30 meters, what is the perimeter of the pool?

Name: _____

Practice 2

Add or subtract. Watch the signs.

① $15 + 28 =$ _____

③ $68 - 35 =$ _____

⑤ $739 + 181 =$ _____

⑦ $512 - 375 =$ _____

② $6108 - 3482 =$ _____

④ $593 + 48 + 390 =$ _____

⑥ $2000 - 827 =$ _____

⑧ $5338 + 2554 =$ _____

Multiply.

⑨ $17 \times 6 =$ _____

⑪ $34 \times 73 =$ _____

⑩ $572 \times 45 =$ _____

⑫ $1000 \times 418 =$ _____

Divide. Watch for remainders.

⑬ $8 \overline{)56}$

⑭ $6 \overline{)537}$

⑮ $7 \overline{)2863}$

⑯ $4 \overline{)3603}$

Replace $\bigcirc$ with $<$, $>$, or $=$.

⑰ $4.1 \bigcirc 4.08$

⑱ $2.25 \bigcirc 22.5$

⑲ $17.5 \bigcirc 17.50$

⑳ $6.97 \bigcirc 11.18$

Multiply.

⑳
$$\begin{array}{r} 2.05 \\ \times 42 \\ \hline \end{array}$$

㉑
$$\begin{array}{r} 205 \\ \times 4.2 \\ \hline \end{array}$$

㉒
$$\begin{array}{r} 20.5 \\ \times 42 \\ \hline \end{array}$$

㉓
$$\begin{array}{r} 666 \\ \times 6.6 \\ \hline \end{array}$$

Add or subtract.

㉔
$$\begin{array}{r} 44.30 \\ - 6.18 \\ \hline \end{array}$$

㉕
$$\begin{array}{r} 9.02 \\ + 3.003 \\ \hline \end{array}$$

㉖
$$\begin{array}{r} 15. \\ - 8.05 \\ \hline \end{array}$$

㉗
$$\begin{array}{r} 614.2 \\ + 827.91 \\ \hline \end{array}$$

Name: _____

Practice 3

Divide. Don't use remainders. All the problems have exact decimal answers.

1 $5 \overline{)8}$

2 $5 \overline{)9}$

3 $5 \overline{)2.5}$

4 $5 \overline{)2.8}$

5 $4 \overline{)1}$

6 $9 \overline{)8.1}$

7 $6 \overline{)45}$

8 $8 \overline{)60}$

9 $2 \overline{)9.3}$

10 $3 \overline{)9.3}$

11 $6 \overline{)12.72}$

12 $8 \overline{)64.24}$

13 $4 \overline{)2}$

14 $4 \overline{)2.4}$

15 $2 \overline{)3.9}$

16 $5 \overline{)3.9}$

17 $3 \overline{)1.23}$

18 $6 \overline{)1.26}$

19 $2 \overline{)7}$

20 $2 \overline{)17}$

Name: _____

Practice 4



Solve these problems.

- 1 Terri has \$2.30. Can she buy four pencils that cost 49¢ each? _____
- 2 Mrs. Lee is fixing a large casserole for a potluck dinner. She is making 50 servings. Each serving requires 0.03 kilogram of rice. How much rice should Mrs. Lee use? _____
- 3 Charlie has \$19.00. He wants to buy three cassette tapes that cost \$6.95 each. Does he have enough money? _____
- 4 Ms. Morales has chartered a bus for the Girl Scout troop's trip to St. Louis. The cost for the bus is \$186.60. The Scouts who go on the trip will share equally in the cost.
 - a. If all 30 girls go on the trip, what will each girl's share be? _____
 - b. If 20 girls go on the trip, what will each girl's share be? _____
 - c. If only ten girls go, what will each girl's share be? _____
- 5 A 7-kilogram beef roast cost Mr. Cox \$33.95. What was the price for 1 kilogram of the roast? _____
- 6 Mr. Moore has saved the license plates from all his cars. He has nailed them to a wall in his garage. The wall is 5 meters long and 3 meters high. How many license plates does he have? _____
- 7 Margarite drives 190.2 kilometers, using 6 liters of gasoline. How far can she drive on 1 liter of gasoline? _____
- 8 Jennifer earned \$34.80 for working eight hours. How much was she paid an hour? _____
- 9 Terence has \$12.00. He wants to buy five tickets to the school play. Each ticket costs \$2.25. Does he have enough money? _____

Name: _____

Practice 5

Solve for n .

① $n = \frac{1}{3}$ of 60

$n =$ _____

② $\frac{2}{5}$ of 40 = n

$n =$ _____

③ $\frac{2}{3}$ of 24 = n

$n =$ _____

④ $n = \frac{1}{6}$ of 90

$n =$ _____

⑤ $\frac{5}{8}$ of 32 = n

$n =$ _____

⑥ $\frac{5}{5}$ of 50 = n

$n =$ _____

Find the decimal equivalent to the nearest hundredth.

⑦ $\frac{1}{4} =$ _____

⑧ $\frac{2}{3} =$ _____

⑨ $\frac{7}{8} =$ _____

Multiply or divide.

⑩ $12.7 \times 100 =$ _____

⑪ $2.3 \div 10 =$ _____

⑫ $29 \div 100 =$ _____

⑬ $0.12 \times 1000 =$ _____

⑭ $5.7 \div 100 =$ _____

⑮ $0.05 \times 100 =$ _____

Divide. Round to the nearest hundredth when necessary.

⑯ $400 \overline{)24,000}$

⑰ $4 \overline{)0.36}$

⑱ $80 \overline{)630}$

Choose the correct answer.

⑲ $21 \overline{)861}$

a. 41

b. 401

c. 4.1

⑳ $52 \overline{)6084}$

a. 11.7

b. 117

c. 1170

Replace $\bigcirc$ with $<$, $>$, or $=$.

㉑ $\frac{6}{11} \bigcirc \frac{7}{11}$

㉒ $\frac{5}{6} \bigcirc \frac{5}{9}$

㉓ $\frac{5}{11} \bigcirc \frac{8}{15}$

Solve these problems.

- ㉔ Javier has \$5.00. How much change will he receive if he uses his money to buy six apples at \$0.39 each?

- ㉕ Mr. Saito drove 1260 miles in 20 hours. What was his average speed for the trip?

Name: _____

Practice 6

Find the missing numerator or denominator.

1 $\frac{1}{6} = \frac{\square}{18}$

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

3 $\frac{1}{6} = \frac{\square}{36}$

4 $\frac{2}{3} = \frac{10}{\square}$

5 $\frac{2}{5} = \frac{\square}{10}$

6 $\frac{5}{6} = \frac{\square}{42}$

7 $\frac{4}{5} = \frac{16}{\square}$

8 $\frac{2}{7} = \frac{\square}{49}$

9 $\frac{2}{3} = \frac{12}{\square}$

10 $\frac{1}{5} = \frac{\square}{10}$

11 $\frac{1}{7} = \frac{\square}{14}$

12 $\frac{3}{4} = \frac{\square}{12}$

13 $\frac{3}{5} = \frac{\square}{25}$

14 $\frac{3}{4} = \frac{\square}{16}$

15 $\frac{5}{6} = \frac{30}{\square}$

16 $\frac{3}{7} = \frac{6}{\square}$

17 $\frac{7}{8} = \frac{\square}{16}$

18 $\frac{1}{3} = \frac{\square}{15}$

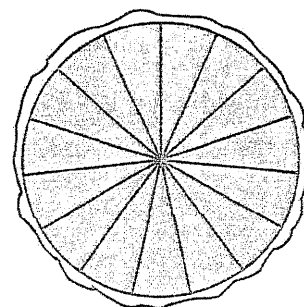


Solve these problems.

Sal's Pizza Place slices large pizzas into 16 equal pieces. Juan ate four pieces and Paul ate $\frac{1}{4}$ of the whole pizza.

- 19 Who ate more pizza, Juan or Paul?

- 20 If Jason ate five slices of what remained after Juan and Paul finished, how much of the pizza could Jane eat and still have one slice remain?



Name: _____

Practice 7

Change each mixed number to an improper fraction.

① $1\frac{3}{4} = \underline{\hspace{2cm}}$

② $2\frac{3}{8} = \underline{\hspace{2cm}}$

③ $1\frac{5}{8} = \underline{\hspace{2cm}}$

④ $4\frac{2}{3} = \underline{\hspace{2cm}}$

⑤ $1\frac{5}{7} = \underline{\hspace{2cm}}$

⑥ $2\frac{5}{6} = \underline{\hspace{2cm}}$

⑦ $3\frac{1}{5} = \underline{\hspace{2cm}}$

⑧ $4\frac{1}{2} = \underline{\hspace{2cm}}$

⑨ $2\frac{3}{5} = \underline{\hspace{2cm}}$

⑩ $1\frac{1}{6} = \underline{\hspace{2cm}}$

⑪ $4\frac{3}{7} = \underline{\hspace{2cm}}$

⑫ $4\frac{1}{4} = \underline{\hspace{2cm}}$

⑬ $1\frac{5}{6} = \underline{\hspace{2cm}}$

⑭ $1\frac{2}{3} = \underline{\hspace{2cm}}$

⑮ $3\frac{7}{8} = \underline{\hspace{2cm}}$

⑯ $6\frac{1}{9} = \underline{\hspace{2cm}}$

⑰ $7\frac{2}{5} = \underline{\hspace{2cm}}$

⑱ $11\frac{3}{4} = \underline{\hspace{2cm}}$

⑲ $8\frac{1}{4} = \underline{\hspace{2cm}}$

⑳ $9\frac{2}{8} = \underline{\hspace{2cm}}$

㉑ $10\frac{5}{7} = \underline{\hspace{2cm}}$

Change each improper fraction to a mixed number.

㉒ $\frac{11}{4} = \underline{\hspace{2cm}}$

㉓ $\frac{13}{6} = \underline{\hspace{2cm}}$

㉔ $\frac{17}{3} = \underline{\hspace{2cm}}$

㉕ $\frac{13}{8} = \underline{\hspace{2cm}}$

㉖ $\frac{16}{7} = \underline{\hspace{2cm}}$

㉗ $\frac{21}{5} = \underline{\hspace{2cm}}$

㉘ $\frac{5}{2} = \underline{\hspace{2cm}}$

㉙ $\frac{21}{6} = \underline{\hspace{2cm}}$

㉚ $\frac{17}{4} = \underline{\hspace{2cm}}$

㉛ $\frac{9}{5} = \underline{\hspace{2cm}}$

㉜ $\frac{17}{7} = \underline{\hspace{2cm}}$

㉝ $\frac{10}{3} = \underline{\hspace{2cm}}$

㉞ $\frac{16}{5} = \underline{\hspace{2cm}}$

㉟ $\frac{12}{7} = \underline{\hspace{2cm}}$

㊱ $\frac{19}{8} = \underline{\hspace{2cm}}$

㊲ $\frac{113}{10} = \underline{\hspace{2cm}}$

㊳ $\frac{53}{6} = \underline{\hspace{2cm}}$

㊴ $\frac{65}{9} = \underline{\hspace{2cm}}$

㊵ $\frac{45}{7} = \underline{\hspace{2cm}}$

㊶ $\frac{49}{5} = \underline{\hspace{2cm}}$

㊷ $\frac{77}{8} = \underline{\hspace{2cm}}$

Practice 8

Name: _____

Use $<$, $>$, or $=$ to compare the fractions.

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

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

3 $\frac{1}{4} \bigcirc \frac{3}{8}$

4 $\frac{4}{6} \bigcirc \frac{6}{9}$

5 $\frac{1}{3} \bigcirc \frac{5}{12}$

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

7 $\frac{3}{5} \bigcirc \frac{9}{15}$

8 $\frac{3}{10} \bigcirc \frac{7}{20}$

9 $\frac{7}{8} \bigcirc \frac{5}{6}$

10 $\frac{7}{10} \bigcirc \frac{8}{15}$

11 $\frac{7}{9} \bigcirc \frac{2}{3}$

12 $\frac{1}{5} \bigcirc \frac{3}{10}$

13 $\frac{5}{12} \bigcirc \frac{1}{4}$

14 $\frac{5}{7} \bigcirc \frac{1}{2}$

15 $\frac{2}{3} \bigcirc \frac{4}{7}$

16 $\frac{4}{9} \bigcirc \frac{1}{2}$



Solve these problems.

- 17 Kendra has completed $\frac{5}{12}$ of the homework. Lisa has completed $\frac{3}{8}$ of the homework. Who has completed more of the homework?

- 18 Arlene measured the lengths of two paper clips. One was $\frac{5}{8}$ of an inch and the other was $\frac{7}{16}$ of an inch. Which was longer?

- 19 Joe answered $\frac{11}{15}$ of the questions correctly on a test, while Jim answered $\frac{3}{5}$ of the questions correctly. Who answered more questions correctly?

- 20 Jill improved her long jump distance by $\frac{3}{4}$ of an inch. Juanita improved her long jump distance by $\frac{9}{12}$ of an inch. Who improved more?

- 21 Shanna's class took a math test. Shanna finished $\frac{5}{6}$ of the problems, Lee finished $\frac{3}{4}$ of the problems, Lisa finished $\frac{11}{12}$ of the problems, and Ahmed finished $\frac{5}{8}$ of the problems. List the students in order of who completed the least number of problems to who completed the greatest number.

Name: _____

Practice 9

Add or subtract.

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

2 $\frac{3}{5} - \frac{1}{10} =$ _____

3 $\frac{4}{9} + \frac{1}{3} =$ _____

4 $\frac{6}{8} - \frac{3}{4} =$ _____

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

6 $\frac{5}{8} - \frac{1}{6} =$ _____

7 $\frac{1}{2} + \frac{3}{8} =$ _____

8 $\frac{7}{9} - \frac{1}{2} =$ _____

9 $\frac{1}{6} + \frac{1}{4} =$ _____

10 $\frac{5}{9} - \frac{1}{3} =$ _____

11 $\frac{7}{8} - \frac{1}{4} =$ _____

12 $\frac{3}{8} + \frac{1}{3} =$ _____

13 $\frac{1}{8} + \frac{1}{2} =$ _____

14 $\frac{5}{8} - \frac{1}{4} =$ _____

15 $\frac{8}{11} - \frac{1}{2} =$ _____

16 $\frac{1}{3} + \frac{4}{7} =$ _____

17 $\frac{3}{4} - \frac{4}{7} =$ _____

18 $\frac{3}{7} + \frac{1}{2} =$ _____

19 $\frac{2}{5} + \frac{1}{4} =$ _____

20 $\frac{3}{4} - \frac{1}{7} =$ _____



Solve these problems.

- 21 On Sunday Catherine was awake $\frac{16}{24}$ of the day. She spent $\frac{1}{2}$ of the day eating. She spent $\frac{1}{8}$ of the day talking on the phone. She also spent $\frac{4}{24}$ of the day visiting relatives.

a. What part of the day was Catherine awake but not eating? _____

b. What took more of her time, eating or talking on the phone?
How much more time? _____

c. What part of the day did Catherine sleep? _____

d. Which took more of Catherine's day, talking on the phone
or visiting relatives? How much more was it? _____

- 22 Gym class lasts $\frac{11}{12}$ hour. Attendance takes $\frac{1}{12}$ hour. Choosing teams for a volleyball game takes $\frac{1}{2}$ hour. The students have been playing the game $\frac{1}{2}$ hour. How much time remains to play volleyball? _____

- 23 On a typical Sunday about how much of the day do you sleep, eat,
and watch television? Assume the day starts at Saturday midnight and
ends at Sunday midnight. _____

10 Practice

Name: _____

Add.

① $3\frac{1}{6} + 1\frac{1}{2} =$ _____

② $2\frac{1}{4} + 1\frac{1}{8} =$ _____

③ $1\frac{1}{3} + 4\frac{1}{3} =$ _____

④ $5\frac{1}{7} + 3\frac{4}{7} =$ _____

⑤ $2\frac{1}{5} + 1\frac{3}{10} =$ _____

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

Subtract.

⑦ $2\frac{7}{8} - 1\frac{5}{8} =$ _____

⑧ $3\frac{1}{2} - 1\frac{1}{4} =$ _____

⑨ $5\frac{3}{7} - 2\frac{1}{7} =$ _____

⑩ $5\frac{3}{4} - 1\frac{1}{8} =$ _____

⑪ $5\frac{1}{8} - 1\frac{3}{4} =$ _____

⑫ $2\frac{5}{12} - 1\frac{1}{3} =$ _____

Add or subtract.

⑬ $7\frac{1}{8} + 6\frac{3}{4} =$ _____

⑭ $5\frac{1}{7} + 1\frac{1}{5} =$ _____

⑮ $5\frac{5}{8} - 3\frac{3}{8} =$ _____

⑯ $4\frac{1}{6} - 2\frac{1}{2} =$ _____

⑰ $5\frac{2}{5} - 1\frac{3}{10} =$ _____

⑱ $6\frac{1}{6} + 4\frac{1}{4} =$ _____

⑲ $3\frac{3}{5} - 3\frac{1}{3} =$ _____

⑳ $1\frac{7}{8} + 2\frac{3}{4} =$ _____

㉑ $4\frac{5}{8} - 2\frac{3}{4} =$ _____

Solve these problems.

- ㉒ This year Emily spends $6\frac{3}{10}$ hours in school each day. Last year she spent $5\frac{7}{12}$ hours in school each day. How many more hours does she spend in school this year than last year?

- ㉓ Stock prices are shown as fractions. A stock on the New York Stock Exchange opened at $\$63\frac{7}{8}$. During the day it gained $\$2\frac{3}{4}$. What was the closing price of this stock?

- ㉔ Chris bought $1\frac{1}{4}$ pounds of bean sprouts, $2\frac{1}{2}$ pounds of mushrooms, and $3\frac{3}{8}$ pounds of carrots. How many pounds of vegetables did Chris buy all together?

- ㉕ A board is $5\frac{3}{8}$ inches wide. The carpenter said that this board is $2\frac{1}{4}$ inches too wide for the job. How wide of a board does the carpenter need?
