



Helping With Math

Converting Decimals to Fractions

GRADE 4



Decimals can be converted into fractions. Decimals in the tenths and hundredths place can be converted into fractions with denominators of 10 and 100 respectively, then must be simplified into its simplest form.

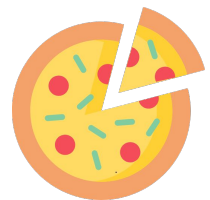


Your pizza is here! Before eating the pizza, make sure to study with me first!

Take a look at this!



$$0.75 = \frac{75}{100} = \frac{3}{4}$$



Converting decimals to fractions is very easy. This can be done in 3 easy steps, which you will be able to learn from this worksheet.

First thing that you need to do when converting a decimal into a fraction is to write down the decimal divided by 1 like "**Decimal/1**".



STEPS AND PROCESS

STEP 1: DIVIDE THE DECIMAL BY 1

When you have the decimal, write it down then divide it by 1. Your decimal should look something like this: **Decimal/1**



Examples: 0.75

$$0.75 = \frac{\quad}{1}$$

$$0.25 = \frac{0.25}{1}$$



STEP 2: MULTIPLY BY 10

Multiply the numerator and denominator by 10 for every number that comes after the decimal point. If there are 2 numbers, then multiply the fraction by 100, since $10 \times 10 = 100$.



Examples:

$$\frac{0.75}{1} \times \frac{100}{100} = \frac{75}{100}$$

$$\frac{0.25}{1} \times \frac{100}{100} = \frac{25}{100}$$

STEP 3: IDENTIFY ITS GREATEST COMMON FACTOR

Now that you have a fraction, you have to simplify it by looking for the GCF. This is the largest number that can both be divided to the numerator and denominator. Note: some fractions cannot be simplified.

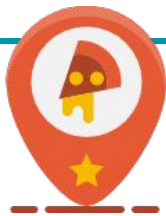


Examples:

$$\frac{75}{100} \div \frac{25}{25} = \frac{3}{4}$$

$$\frac{25}{100} \div \frac{25}{25} = \frac{1}{4}$$





HOW TO FIND THE GCF?

1. List down all the factors of the given numbers until you find all the prime numbers.
2. Get all the common prime numbers then multiply it.

Example:

$$3 \times 5 \times 5 = 75$$

$$2 \times 2 \times 5 \times 5 = 100$$

Common Factors:
5 & 5

So: $5 \times 5 = \underline{25}$

HOW TO CONVERT FRACTIONS INTO DECIMALS?

1. The line in between the numerator and the denominator can also be rewritten as a division sign.
2. Divide the numerator from the denominator and the answer should be a decimal.
3. The number of decimals will depend on what is being asked. Round off the decimals to the nearest hundredths or thousandths.

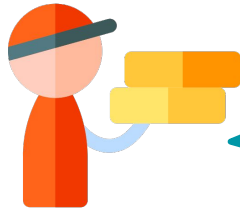
Examples:

$$\frac{3}{4} = 3 \div 4 = 0.75$$

$$\frac{1}{4} = 1 \div 4 = 0.25$$



LET'S PRACTICE!



Hi there! Do you remember the steps? Convert the following into fractions!

Show your solutions here:

0.6

Show your solutions here:

0.30

Ready to eat the pizza?
Convert the fractions into decimals!



Show your solutions here:

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

Show your solutions here:

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



TABLE OF ACTIVITIES

1. Pizza Toppings
2. Get Free Pizza
3. Origin of Pizza
4. Join the Game
5. Make the Pizza
6. Become a Chef
7. Shuffled Orders
8. I am the Manager
9. Help the Chef
10. Enter the Restaurant



PIZZA TOPPINGS

Help the chef place all the pizza toppings. Match the decimal to its fraction form by drawing a line from Column A to Column B.

COLUMN A

0.5

0.25

0.12

0.4

0.44

0.3



COLUMN B

$\frac{3}{25}$

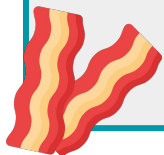
$\frac{11}{25}$

$\frac{2}{5}$

$\frac{1}{2}$

$\frac{3}{10}$

$\frac{1}{4}$



GET FREE PIZZA

Your favorite Pizza Place is giving away a free pizza. To get one, you have to choose from the box the correct fraction form of the given decimals. Show your solutions on the spaces provided.

$$\frac{18}{25}$$

$$\frac{11}{20}$$

$$\frac{7}{50}$$

$$\frac{39}{50}$$

$$\frac{23}{25}$$

$$\frac{9}{25}$$

1.
 $0.14 =$



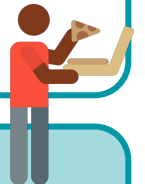
2.
 $0.72 =$

3.
 $0.92 =$



4.
 $0.36 =$

5.
 $0.55 =$



6.
 $0.78 =$



ORIGIN OF PIZZA

You love eating pizza. Identify from which country did pizza originate by answering the questions allocated for each box and choosing the answers from the choices below. Write the letters on the boxes provided.



1.

2.

3.

4.

5.

1.

0.34

2.

0.8

3.

0.66

4.

0.42

5.

0.25



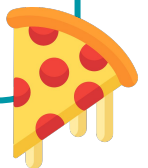
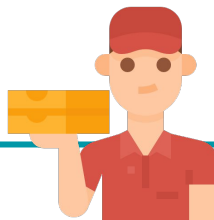
$$L = \frac{21}{50}$$

$$T = \frac{4}{5}$$

$$I = \frac{17}{50}$$

$$A = \frac{33}{50}$$

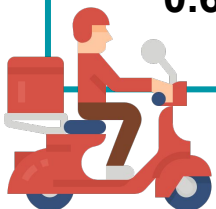
$$Y = \frac{1}{4}$$



JOIN THE GAME

An event is happening at the Pizza Place. Let us join the event and complete the table below to win the grand prize. Show your solutions.

DECIMAL	GCF	FRACTION
0.12	1.)	$\frac{3}{25}$
0.26	2 2	2.)
0.16	3.)	4.)
0.76	4 4	5.)
0.45	6.)	$\frac{9}{20}$
0.6	7.)	$\frac{3}{5}$



MAKE THE PIZZA

There are many customers today. Help the chef make the pizza orders by filling in the blanks.

1.

$$0.15 = \frac{3}{20}$$
$$\begin{array}{r} 0.15 \\ \hline 1 \end{array} \times \begin{array}{r} 100 \\ \hline 100 \end{array}$$
$$\begin{array}{r} 15 \\ \hline 100 \end{array} \div \begin{array}{r} 5 \\ \hline 5 \end{array}$$

3.

$$0.34 = \frac{\quad}{\quad}$$
$$\begin{array}{r} 0.34 \\ \hline 1 \end{array} \times \begin{array}{r} \quad \\ \hline \quad \end{array}$$
$$\begin{array}{r} 34 \\ \hline 100 \end{array} \div \begin{array}{r} \quad \\ \hline \quad \end{array}$$



2.

$$0.85 = \frac{\quad}{\quad}$$
$$\begin{array}{r} 0.85 \\ \hline 1 \end{array} \times \begin{array}{r} \quad \\ \hline \quad \end{array}$$
$$\begin{array}{r} 85 \\ \hline 100 \end{array} \div \begin{array}{r} \quad \\ \hline \quad \end{array}$$

4.

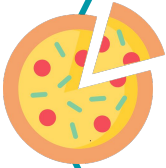
$$0.98 = \frac{\quad}{\quad}$$
$$\begin{array}{r} 0.98 \\ \hline 1 \end{array} \times \begin{array}{r} \quad \\ \hline \quad \end{array}$$
$$\begin{array}{r} 98 \\ \hline 100 \end{array} \div \begin{array}{r} \quad \\ \hline \quad \end{array}$$



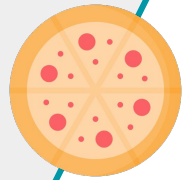
BECOME A CHEF

You are applying as a chef in the restaurant. Show off your skills by making a pizza and solving for the correct fraction form of the decimals below. Show the solution.

1. $0.28 = \frac{1}{3}$



4. $0.24 = \frac{7}{9}$



2. $0.65 = \frac{2}{5}$

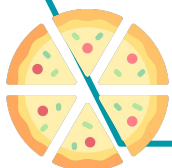


5. $0.54 = \frac{1}{5}$

3. $0.88 = \frac{3}{4}$



6. $0.78 = \frac{2}{3}$



SHUFFLED ORDERS

The pizza orders got shuffled. Convert the given decimals into fractions to arrange the orders. Show your solutions.

1.

0.4

4.

0.45

2.

0.9

5.

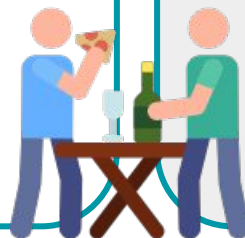
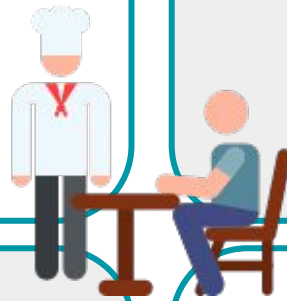
0.28

3.

0.3

6.

0.19



I AM THE MANAGER

You have been assigned as the manager of the Pizza Place. Help solve the problems below.



There is a 0.24 dollar change for your money when you bought the pizza. What is 0.24 dollar in fraction?



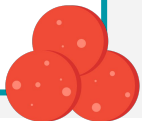
0.35 grams of cheese is left in the storage room. What is the fraction form of the 0.35 grams of cheese?



The delivery man is 0.64 kilometers away from the house. What is 0.64 kilometers in fraction?



Supplies are coming. 0.16 grams of sauce is to be delivered. What is 0.16 grams in fraction?



There are 0.22 pepperonis in one pizza. Convert 0.22 into fraction.



Your customer is asking for 0.74 chili sauce. What is 0.74 in fraction?

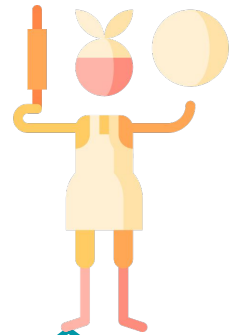
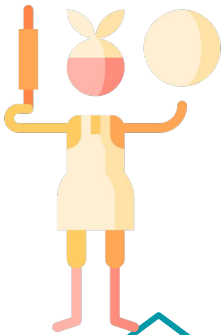


HELP THE CHEF

The chef is asking for your help. Provide him with 5 decimals each for the categories being asked below.

WITH GCF OF 1

WITH GCF OF 2



WITH GCF OF 4

WITH GCF OF 5

WITH GCF OF 10

Converting Decimals to Fractions

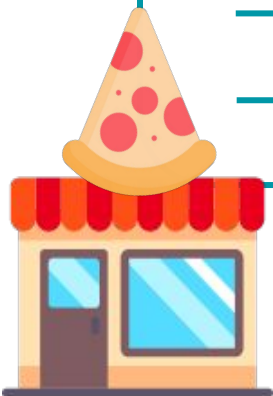


ENTER THE RESTAURANT

The restaurant is about to open. To enter, you have to answer how you will be able to use conversion of decimals into fraction in real life.

How will you be able to use conversion of decimals into fraction in real life?

In your own words, briefly explain the steps on conversion from decimals to fractions and vice versa.



ANSWER GUIDE

Activity 1

1. $0.5 = \frac{1}{2}$ 2. $0.25 = \frac{1}{4}$ 3. $0.12 = \frac{3}{25}$ 4. $0.4 = \frac{2}{5}$
5. $0.44 = \frac{11}{25}$ 6. $0.3 = \frac{3}{10}$

Activity 2

1. $\frac{7}{50}$ 2. $\frac{18}{25}$ 3. $\frac{23}{25}$ 4. $\frac{9}{25}$ 5. $\frac{11}{20}$ 6. $\frac{39}{50}$

Activity 3

1. I 2. T 3. A 4. L 5. Y

Activity 4

1. 12 2. $\frac{13}{50}$ 3. 4 4. $\frac{4}{25}$ 5. $\frac{19}{25}$ 6. 5 7. 2

Activity 5

1. $\frac{3}{20}$; $\frac{100}{100}$; $\frac{5}{5}$ 2. $\frac{17}{20}$; $\frac{100}{100}$; $\frac{5}{5}$
3. $\frac{17}{50}$; $\frac{100}{100}$; $\frac{2}{2}$ 4. $\frac{49}{50}$; $\frac{100}{100}$; $\frac{2}{2}$



ANSWER GUIDE

Activity 6

1. $\frac{7}{25}$ 2. $\frac{13}{20}$ 3. $\frac{22}{25}$ 4. $\frac{6}{25}$ 5. $\frac{27}{50}$ 6. $\frac{39}{50}$

Activity 7

1. $\frac{2}{5}$ 2. $\frac{9}{10}$ 3. $\frac{3}{10}$ 4. $\frac{9}{20}$ 5. $\frac{7}{25}$ 6. $\frac{19}{100}$

Activity 8

1. $\frac{6}{25}$ 2. $\frac{7}{20}$ 3. $\frac{16}{25}$ 4. $\frac{4}{25}$ 5. $\frac{11}{50}$ 6. $\frac{37}{50}$

Activity 9

GCF of 1	GCF of 2	GCF of 4	GCF of 5	GCF of 10
• 0.7	• 0.2	• 0.16	• 0.5	• 0.10
• 0.9	• 0.6	• 0.14	• 0.15	• 0.60
• 0.3	• 0.14	• 0.28	• 0.35	• 0.70

Here are 3 examples each. Answers may vary.

Activity 10

Answers may vary.



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