

## MATH

### Q.1 Solve the following word problems:

1. Kyle is a basketball player. His bottle was full at the beginning of the game. At the end of the first quarter, he drank  $\frac{5}{7}$  of the bottle. A coach filled up his bottle for him during the second quarter. At the end of the second quarter, he drank some more water and left the only  $\frac{2}{7}$  of water in the bottle. How much water did he drink during the first half of the game?
2. Ethan is responsible to write the minutes for the meeting. During the meeting, he finished writing  $\frac{1}{8}$  of the minutes. Before getting off work, he finished another  $\frac{3}{8}$  of the minutes. How much of the minutes does Ethan still need to work on?

<https://www.k5learning.com/>

3. Darren is on a super effective diet. He has lost 16% of his weight this month. If he started with 75 kg, how much does he weigh now? (Khan Academy)
4. Find the increase in ₹50 by 20 %.
5. Round off the following decimals:

Number	2 decimal point	1 decimal point	Nearest whole number	Nearest 10	Nearest 100
512.715					
623.819					
293.214					
90.432					

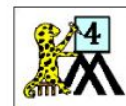
6. Solve the word problem by clicking on the following link:

<https://www.education.com/download/worksheet/87208/fractions-word-problems-1.pdf>

7. Solve:

Name \_\_\_\_\_

Date \_\_\_\_\_



## ROUNDING DECIMALS CHALLENGE 1

Use the clues to find the correct answer from the eight possibilities.

### CHALLENGE A

- I am less than 10.
- I am 10 rounded to the nearest whole.
- My tenths digit is odd.
- I have no hundredths digit.

Who am I?

7.83	10.3	8.7	9.51
10.27	9.9	9.83	10.12

### CHALLENGE B

- I am larger than 6.
- To the nearest whole, I round down not up.
- My ones digit is odd, but my tenths digit is even.

Who am I?

5.28	9.84	8.37	7.85
7.24	8.6	9.7	6.8

# Converting Fractions to Decimals

## Cross-Curricular Focus: Mathematics



Fractions and **decimals** are two different ways to show the same values: parts of wholes. Knowing both systems well and being able to change from one system to the other will help you succeed. Not only will this help you with math work in school, but also in solving some of life's everyday problems.

Many students have trouble changing fractions to decimals because they don't know where to start. Remember that we have a base-10 place value system. The first space to the right of the decimal point is called the **tenths** place. The second space is called the **hundredths** place. For each column that you move to the right, you are dividing the previous column by ten. For each column that you move to the left, you are multiplying the previous column by ten. Because of this predictable pattern, one easy way to turn a fraction into a decimal is to check and see if the denominator can easily be turned into ten, one hundred, or one thousand. For example, if you need to write the fraction  $\frac{1}{4}$  as a decimal, you can multiply the numerator and the denominator both by 25 to get a new fraction:  $\frac{25}{100}$ . Since the second decimal place is the hundredths place, your decimal is simply .25. The digit 5 lands in the hundredths place and gives the decimal its name: twenty-five hundredths.

Sometimes it is too difficult to make an **equivalent** fraction that is easy to convert into a decimal. In these cases, the fraction should be treated as a division problem. Simply read the fraction from the top down. When you reach the fraction bar that separates the numerator and the denominator, read it as "divided by". So for the fraction  $\frac{4}{5}$ , read it as "4 divided by 5."

At first this may seem difficult to do. Remember, you are making a decimal. You will need to add a decimal point and a zero to the four:  $5 \overline{)4.0}$ . In this way you are able to divide 5 into 40 instead of just 4. You know  $5 \times 8 = 40$ , but with the decimal point your answer will be .8 (eight-tenths).

With practice, you will develop your skill at converting fractions to decimals. Soon, you will not even have to think about what you are doing, you will just know what to do!

**Answer the following questions based on the reading passage. Don't forget to go back to the passage whenever necessary to find or confirm your answers.**

1) What is the relationship between fractions and decimals? \_\_\_\_\_

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2) Why should you try to make an equivalent fraction with a multiple of ten as your denominator?

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3) What is the second decimal place to the right of the decimal point called? Why?

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4) What would you say if you were changing the fraction  $\frac{9}{16}$  into a division problem?

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5) Apply what you have learned to write  $\frac{9}{20}$  as a decimal.

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