

FRACTIONS AND DECIMALS

Fraction Definitions

What is a fraction?

A fraction is a number which contains parts of a whole.
Fractions can be smaller than or larger than one (one whole).

A fraction is a number with the form: $\frac{n}{d}$
where n and d are two numbers.

The number n above the line is called the **numerator**.
The number d below the line is called the **denominator**.

Alternative notation

Alternative ways of expressing this statement include:
n over d, $n \div d$

Fraction Notation Example

The fraction $\frac{5}{6}$ could be expressed as: five-sixths, five over six, $5 \div 6$

Proper and Improper Fractions & Mixed Numbers

A fraction is a number with the form:

$$\frac{N}{d}$$

- If the numerator is smaller than the denominator (if $n < d$), then the fraction is called a **proper fraction**, and its value is less than 1.
- If the numerator is greater than the denominator (if $n > d$), then the fraction is called an **improper fraction**, and its value is greater than 1.
- If the numerator is equal to the denominator, then the fraction's value is equal to 1.
- A **mixed number (or mixed fraction)** is a number that has a whole number part to it, and a fraction part to it.

Fractions Decimals Percents

Below are some common conversions for fractions into decimals and percents.

Fraction	Equivalent to	Decimal	Percent
----------	------------------	---------	---------

1/2	1/2	0.5	50%
2/2	1	1.0	100%
1/3	1/3	0.333	33.3%
2/3	2/3	0.667	66.7%
3/3	1	1.0	100%
1/4	1/4	0.25	25%
2/4	1/2	0.5	50%
3/4	3/4	0.75	75%
4/4	1	1.0	100%
1/5	1/5	0.2	20%
2/5	2/5	0.4	40%
3/5	3/5	0.6	60%
4/5	4/5	0.8	80%
5/5	5/5	1.0	100%
1/6	1/6	0.167	16.7%
2/6	1/3	0.333	33.3%
3/6	1/2	0.5	50%
4/6	2/3	0.666	66.7%
5/6	5/6	0.833	83.3%
6/6	1	1.0	100%
1/8	1/8	0.125	12.5%
2/8	1/4	0.25	25%
3/8	3/8	0.375	37.5%
4/8	1/2	0.5	50%
5/8	5/8	0.625	62.5%
6/8	3/4	0.75	75%
7/8	7/8	0.875	87.5%
8/8	1	1.0	100%
1/10	1/10	0.1	10%
2/10	1/5	0.2	20%
3/10	3/10	0.3	30%
4/10	2/5	0.4	40%
5/10	1/2	0.5	50%
6/10	3/5	0.6	60%

7/10	<u>7</u> /10	0.7	70%
8/10	4/ <u>5</u>	0.8	80%
9/10	9/ <u>10</u>	0.9	90%
10/10	1	1.0	100%

Where a digit is underlined, it means that the number has been rounded to 3 decimal places, or to the nearest 0.1%.

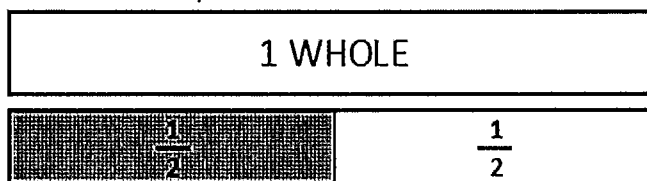
What is an Equivalent fraction?

So what is an equivalent fraction?

If two fractions are **equivalent**, it means that they are equal, or represent the same value.

Example 1

Let us look at the fraction strips for a half.



A half is worth half of a whole. If we split each of the halves into two equal pieces, we end up with fourths or a whole split up into 4 equal parts.



Each half has been split into two-fourths (as there are two parts out of 4 parts shaded), so we have the equivalent fraction:
One half is equivalent to (or equal to) two-fourths.

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EQUIVALENT FRACTIONS WITH CIRCLES SHEET 4

Shade in the correct fraction of the circle and complete the equivalent fractions.

The first one is done for you.

1)		=		6)		=	
	$\frac{3}{5}$		$\frac{6}{10}$		—		—
2)		=		7)		=	
	—		—		—		—
3)		=		8)		=	
	—		—		—		—
4)		=		9)		=	
	—		—		—		—
5)		=		10)		=	
	—		—		—		—



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EQUIVALENT FRACTIONS SHEET 3

Remember, when you multiply or divide the numerator and denominator of a fraction by the same number, you get a fraction that is equal, or equivalent, to the first one.

Use the equivalent fraction strips resources to help you if you get stuck!

<http://www.math-salamanders.com/fraction-strip.html>



1) $\frac{1}{3} = \frac{\quad}{6}$ 2) $\frac{1}{4} = \frac{\quad}{12}$ 3) $\frac{1}{3} = \frac{\quad}{9}$ 4) $\frac{1}{2} = \frac{\quad}{12}$

5) $\frac{1}{4} = \frac{\quad}{8}$ 6) $\frac{1}{2} = \frac{\quad}{8}$ 7) $\frac{1}{6} = \frac{\quad}{12}$ 8) $\frac{1}{5} = \frac{\quad}{10}$

9) $\frac{2}{2} = \frac{\quad}{4}$ 10) $\frac{3}{4} = \frac{\quad}{8}$ 11) $\frac{2}{3} = \frac{\quad}{6}$ 12) $\frac{2}{4} = \frac{\quad}{12}$

13) $\frac{2}{3} = \frac{\quad}{9}$ 14) $\frac{4}{6} = \frac{\quad}{12}$ 15) $\frac{3}{5} = \frac{\quad}{10}$ 16) $\frac{3}{4} = \frac{\quad}{12}$

17) $\frac{4}{5} = \frac{\quad}{10}$ 18) $\frac{3}{6} = \frac{\quad}{12}$ 19) $\frac{2}{5} = \frac{\quad}{10}$ 20) $\frac{4}{4} = \frac{\quad}{12}$

21) $\frac{1}{2} = \frac{4}{\quad}$ 22) $\frac{1}{4} = \frac{3}{\quad}$ 23) $\frac{1}{3} = \frac{3}{\quad}$ 24) $\frac{2}{4} = \frac{4}{\quad}$

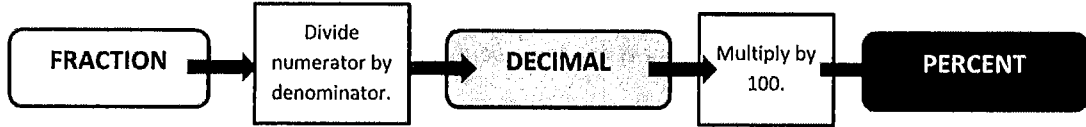
25) $\frac{1}{2} = \frac{5}{\quad}$ 26) $\frac{3}{4} = \frac{6}{\quad}$ 27) $\frac{2}{3} = \frac{6}{\quad}$ 28) $\frac{3}{4} = \frac{9}{\quad}$

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FRACTIONS TO DECIMALS & PERCENTS SHEET 1



FRACTION	DECIMAL	PERCENT
$\frac{1}{2}$		
$\frac{3}{4}$		
$\frac{2}{5}$		
$\frac{1}{8}$		
$\frac{7}{8}$		
$\frac{1}{4}$		
$\frac{7}{10}$		
$\frac{3}{10}$		
$\frac{1}{3}$		
$\frac{5}{6}$		
$\frac{2}{9}$		
$\frac{5}{4}$		
$\frac{3}{16}$		
$\frac{8}{5}$		
$\frac{7}{50}$		

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ADDING SUBTRACTING FRACTIONS WITH LIKE DENOMINATORS SHEET 1

1) $\frac{2}{5} + \frac{1}{5} = \frac{\quad}{5}$

2) $\frac{3}{6} - \frac{2}{6} = \frac{\quad}{6}$

3) $\frac{2}{7} + \frac{4}{7} = \frac{\quad}{7}$

4) $\frac{1}{8} + \frac{2}{8} = \frac{\quad}{8}$

5) $\frac{3}{5} - \frac{1}{5} = \frac{\quad}{5}$

6) $\frac{5}{10} - \frac{4}{10} = \frac{\quad}{10}$

7) $\frac{2}{9} + \frac{3}{9} = \frac{\quad}{9}$

8) $\frac{6}{11} - \frac{3}{11} = \frac{\quad}{11}$

9) $\frac{9}{20} - \frac{2}{20} = \frac{\quad}{20}$

10) $\frac{1}{7} + \frac{4}{7} = \frac{\quad}{7}$

11) $\frac{8}{20} + \frac{3}{20} = \frac{\quad}{20}$

12) $\frac{8}{12} - \frac{3}{12} = \frac{\quad}{12}$

13) $\frac{4}{15} + \frac{7}{15} = \frac{\quad}{15}$

14) $\frac{11}{25} - \frac{7}{25} = \frac{\quad}{25}$

15) $\frac{7}{11} - \frac{3}{11} = \frac{\quad}{11}$

16) $\frac{4}{13} + \frac{5}{13} = \frac{\quad}{13}$

17) $\frac{9}{25} - \frac{9}{25} = \frac{\quad}{25}$

18) $\frac{13}{25} + \frac{6}{25} = \frac{\quad}{25}$

19) $\frac{5}{14} + \frac{4}{14} = \frac{\quad}{14}$

20) $\frac{11}{13} - \frac{9}{13} = \frac{\quad}{13}$



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ADDING SUBTRACTING FRACTIONS SHEET 1

1) $\frac{1}{2} + \frac{1}{4} = \frac{\quad}{4} + \frac{1}{4} = \frac{\quad}{4}$

2) $\frac{1}{2} - \frac{5}{12} = \frac{\quad}{12} - \frac{5}{12} = \frac{\quad}{12}$

3) $\frac{1}{5} + \frac{4}{15} = \frac{\quad}{15} + \frac{4}{15} = \frac{\quad}{15}$

4) $\frac{2}{3} - \frac{3}{6} = \frac{\quad}{6} - \frac{1}{6} = \frac{\quad}{6}$

5) $\frac{4}{7} - \frac{5}{14} = \frac{\quad}{14} - \frac{5}{14} = \frac{\quad}{14}$

6) $\frac{1}{4} + \frac{5}{8} = \frac{\quad}{8} + \frac{5}{8} = \frac{\quad}{8}$

7) $\frac{3}{5} - \frac{7}{15} = \frac{\quad}{15} - \frac{\quad}{15} = \frac{\quad}{15}$

8) $\frac{4}{9} + \frac{3}{18} = \frac{\quad}{18} + \frac{\quad}{18} = \frac{\quad}{18}$

9) $\frac{5}{16} + \frac{1}{8} = \frac{\quad}{16} + \frac{\quad}{16} = \frac{\quad}{16}$

10) $\frac{17}{18} - \frac{2}{3} = \frac{\quad}{18} - \frac{\quad}{18} = \frac{\quad}{18}$

11) $\frac{4}{5} + \frac{3}{25} = \frac{\quad}{25} + \frac{\quad}{25} = \frac{\quad}{25}$

12) $\frac{13}{21} - \frac{1}{7} = \frac{\quad}{21} - \frac{\quad}{21} = \frac{\quad}{21}$

13) $\frac{11}{15} - \frac{3}{5} = \frac{\quad}{15} - \frac{\quad}{15} = \frac{\quad}{15}$

14) $\frac{15}{36} + \frac{1}{9} = \frac{\quad}{36} + \frac{\quad}{36} = \frac{\quad}{36}$

15) $\frac{21}{28} - \frac{3}{4} = \frac{\quad}{28} - \frac{\quad}{28} = \frac{\quad}{28}$

16) $\frac{12}{35} + \frac{1}{5} = \frac{\quad}{35} + \frac{\quad}{35} = \frac{\quad}{35}$

17) $\frac{4}{5} + \frac{3}{25} = \frac{\quad}{25} + \frac{\quad}{25} = \frac{\quad}{25}$

18) $\frac{13}{24} - \frac{1}{3} = \frac{\quad}{24} - \frac{\quad}{24} = \frac{\quad}{24}$

19) $\frac{3}{4} - \frac{5}{16} = \frac{\quad}{16} - \frac{5}{16} = \frac{\quad}{16}$

20) $\frac{5}{18} + \frac{1}{9} = \frac{\quad}{18} + \frac{\quad}{18} = \frac{\quad}{18}$



How do you Multiply Fractions

Before you start:

- Convert any mixed numbers into improper fractions;
- Put any integers over a denominator of 1.

Step 1

Re-write the fraction equation into a single fraction.

Step 2 (optional)

Cancel any common factors of both the numerator and the denominator.

This make the next couple of steps easier!

Step 3 (this may not be needed after Step 2)

Work out the products in the numerator and denominator. This will give you the answer.

Step 4 (optional)

Simplify the answer if needed.

You should have now found your fraction of a number!

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MULTIPLYING FRACTIONS BY AN INTEGER

SHEET 1

To multiply a fraction by an integer, simply multiply the numerator by the integer.
Remember also that $\frac{1}{3} \times 5$ is the same as $\frac{1}{3}$ of 5.



Example $\frac{2}{5} \times 6 = \frac{2 \times 6}{5} = \frac{12}{5}$

Multiply these fractions, leaving your answer as an improper fraction where appropriate.

1) $\frac{1}{3} \times 5 = \frac{\quad}{3}$ 2) $\frac{1}{5}$ of 7 = $\frac{\quad}{5}$ 3) $8 \times \frac{1}{7} = \frac{\quad}{7}$

4) $\frac{2}{3}$ of 4 = $\frac{\quad}{3}$ 5) $\frac{1}{6} \times 11 = \frac{\quad}{6}$ 6) $\frac{3}{4} \times 3 = \frac{\quad}{4}$

7) $2 \times \frac{4}{5} = \frac{\quad}{5}$ 8) $4 \times \frac{2}{9} = \frac{\quad}{9}$ 9) $9 \times \frac{1}{2} = \frac{\quad}{2}$

10) $\frac{1}{8}$ of 15 = $\frac{\quad}{8}$ 11) $\frac{2}{7} \times 6 = \frac{\quad}{7}$ 12) $8 \times \frac{3}{7} = \frac{\quad}{7}$

13) $7 \times \frac{5}{6} = \frac{\quad}{6}$ 14) $6 \times \frac{4}{9} = \frac{\quad}{9}$ 15) $\frac{2}{7} \times 8 = \frac{\quad}{7}$

16) $\frac{3}{8} \times 11 = \frac{\quad}{8}$ 17) $\frac{4}{7}$ of 9 = $\frac{\quad}{7}$ 18) $11 \times \frac{5}{6} = \frac{\quad}{6}$

19) $12 \times \frac{4}{5} = \frac{\quad}{5}$ 20) $\frac{2}{7} \times 16 = \frac{\quad}{7}$ 21) $24 \times \frac{1}{9} = \frac{\quad}{9}$

22) $11 \times \frac{3}{10} = \frac{\quad}{10}$ 23) $\frac{7}{8} \times 9 = \frac{\quad}{8}$ 24) $13 \times \frac{4}{11} = \frac{\quad}{11}$

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MULTIPLYING FRACTIONS SHEET 2

Multiply these fractions together, giving your answer as an improper fraction in simplest form. Remember to cancel any common factors.

Examples

$$\frac{8}{3} \times \frac{3}{5} = \frac{8 \times 3}{3 \times 5} = \frac{8}{5}$$

$$\frac{4}{7} \times 5 = \frac{4 \times 5}{7} = \frac{20}{7}$$

1) $\frac{1}{3} \times 8 = \frac{1 \times 8}{3} = \frac{\quad}{3}$

2) $\frac{2}{5} \times \frac{1}{2} = \frac{2 \times 1}{5 \times 2} = \frac{\quad}{5}$

3) $\frac{5}{2} \times \frac{3}{4} = \frac{5 \times 3}{2 \times 4} = \frac{\quad}{\quad}$

4) $\frac{4}{7} \times 6 = \frac{4 \times 6}{7} = \frac{\quad}{\quad}$

5) $\frac{5}{8} \times \frac{1}{5} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$

6) $\frac{2}{9} \times 7 = \frac{\quad}{\quad} = \frac{\quad}{\quad}$

7) $\frac{9}{4} \times \frac{4}{7} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$

8) $6 \times \frac{3}{11} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$

9) $\frac{11}{8} \times \frac{2}{3} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$

10) $\frac{7}{15} \times \frac{4}{7} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$

11) $\frac{4}{15} \times \frac{9}{4} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$

12) $9 \times \frac{7}{11} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$

13) $\frac{6}{15} \times \frac{4}{3} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$

14) $\frac{6}{5} \times \frac{8}{7} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$

15) $\frac{8}{3} \times \frac{4}{9} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$

16) $\frac{12}{5} \times \frac{2}{9} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$



How to Divide Fractions

Step 1

If any of the fractions are mixed fractions, then first convert them into improper fractions.

Swap the numerator and denominator of the dividend fraction (the fraction *after* the \div sign) and change the operand to a 'x' instead of a ' \div ' .

Step 2

Multiply the numerators and denominators of the fractions together, This will give you the answer.

You should have now found your fraction of a number!

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DIVIDING FRACTIONS SHEET 1

To divide two fractions, follow these two simple steps:

- invert the divisor (swap the numerator and denominator of the second fraction) and change the division operator to a multiplication operator.
- multiply the two fractions together.

Example $\frac{3}{4} \div \frac{2}{7} = \frac{3}{4} \times \frac{7}{2} = \frac{21}{8}$

The second fraction has been inverted.



Work out these fraction divisions. Your answer can be left as an improper fraction and does not need to be in simplest form.

1) $\frac{2}{3} \div \frac{1}{2} = \frac{2}{3} \times \frac{2}{1} = \underline{\quad}$ 2) $\frac{3}{4} \div \frac{1}{3} = \frac{3}{4} \times \frac{3}{1} = \underline{\quad}$

3) $\frac{1}{5} \div \frac{1}{3} = \frac{1}{5} \times \frac{3}{1} = \underline{\quad}$ 4) $\frac{2}{5} \div \frac{2}{3} = \frac{2}{5} \times \underline{\quad} = \underline{\quad}$

5) $\frac{3}{8} \div \frac{2}{5} = \underline{\quad} \times \underline{\quad} = \underline{\quad}$ 6) $\frac{1}{7} \div \frac{4}{9} = \underline{\quad} \times \underline{\quad} = \underline{\quad}$

7) $\frac{3}{8} \div \frac{2}{9} = \underline{\quad} \times \underline{\quad} = \underline{\quad}$ 8) $\frac{4}{5} \div \frac{1}{7} = \underline{\quad} \times \underline{\quad} = \underline{\quad}$

9) $\frac{4}{9} \div \frac{3}{10} = \underline{\quad} \times \underline{\quad} = \underline{\quad}$ 10) $\frac{5}{12} \div \frac{3}{7} = \underline{\quad} \times \underline{\quad} = \underline{\quad}$

11) $\frac{2}{7} \div \frac{6}{11} = \underline{\quad} \times \underline{\quad} = \underline{\quad}$ 12) $\frac{4}{5} \div \frac{7}{10} = \underline{\quad} \times \underline{\quad} = \underline{\quad}$

13) $\frac{4}{5} \div \frac{3}{8} = \underline{\quad} \times \underline{\quad} = \underline{\quad}$ 14) $\frac{2}{9} \div \frac{3}{10} = \underline{\quad} \times \underline{\quad} = \underline{\quad}$

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DIVIDING FRACTIONS SHEET 4

Work out these fraction divisions.

Your answer should be put in simplest form, and can be left as an improper fraction.

1) $\frac{3}{7} \div \frac{2}{3} =$

2) $\frac{5}{9} \div \frac{1}{8} =$

3) $\frac{4}{5} \div \frac{4}{9} =$

4) $\frac{5}{11} \div \frac{2}{3} =$

5) $\frac{3}{15} \div \frac{2}{9} =$

6) $\frac{1}{10} \div \frac{3}{15} =$

7) $\frac{6}{7} \div \frac{10}{3} =$

8) $\frac{12}{5} \div \frac{4}{5} =$

9) $\frac{11}{9} \div \frac{3}{7} =$

10) $\frac{5}{2} \div \frac{7}{9} =$

11) $\frac{5}{8} \div \frac{9}{10} =$

12) $\frac{9}{7} \div \frac{3}{4} =$

13) $\frac{6}{15} \div \frac{5}{12} =$

14) $\frac{8}{9} \div \frac{1}{6} =$

15) $\frac{7}{10} \div \frac{11}{6} =$

16) $\frac{5}{9} \div \frac{2}{13} =$

17) $\frac{6}{11} \div \frac{4}{15} =$

18) $\frac{8}{7} \div \frac{9}{4} =$

19) $\frac{4}{7} \div \frac{2}{11} =$

20) $\frac{6}{5} \div \frac{5}{8} =$

"If you can work these out, you have mastered dividing fractions!"



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PLACE VALUE: TENTHS SHEET 5



Use your place value knowledge to work out the totals.

Remember to count from the largest value digit first.

1) $4 + 0.3 =$

2) $7 + 0.8 =$

3) $1 + 0.2 =$

4) $10 + 5 + 0.3 =$

5) $70 + 4 + 0.5 =$

6) $80 + 0.9 =$

7) $40 + 5 + 0.3 =$

8) $10 + 0.6 + 4 =$

9) $30 + 0.2 + 7 =$

10) $100 + 0.8 + 5 =$

11) $0.4 + 7 + 50 =$

12) $0.9 + 20 + 6 =$

13) $50 + 0.5 + 9 =$

14) $100 + 0.2 + 26 =$

15) $71 + 200 + 0.8 =$

16) $50 + 7.8 =$

17) $70 + 2.5 =$

18) $30.6 + 7 =$

19) $40.2 + 3 =$

20) $107 + 80.6 =$

21) $10 + \underline{\quad} + 4 = 14.6$

22) $70 + 8 + \underline{\quad} = 78.7$

23) $100 + 52 + \underline{\quad} = 152.2$

24) $0.3 + \underline{\quad} + 200 = 240.3$

25) $0.6 + 90 + \underline{\quad} = 96.6$

26) $52 + \underline{\quad} + 100 = 152.7$

27) $30 + 0.8 + \underline{\quad} = 230.8$

28) $70.5 + 100 + \underline{\quad} = 172.5$

29) $200 + 50.6 + \underline{\quad} = 259.6$

30) $\underline{\quad} + 6.7 + 100 = 176.7$

31) $8.3 + \underline{\quad} + 40 = 848.3$

32) $80 + 300 + \underline{\quad} = 382.4$

33) $600 + 90 + \underline{\quad} = 698.6$

34) $720 + \underline{\quad} = 727.9$

35) $\underline{\quad} + 130 = 135.7$

36) $200 + \underline{\quad} = 247.6$

37) $700 + \underline{\quad} = 781.3$

38) $\underline{\quad} + 8 = 68.2$

39) $9 + \underline{\quad} = 129.5$

40) $200.6 + \underline{\quad} = 257.6$



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DECIMAL PLACE VALUE CHART 1A

 DECIMAL PLACE VALUE CHART													
One Millions	Hundred Thousands	Ten Thousands	One Thousands	Hundreds	Tens	Ones	Decimal point ↓	Tenths	Hundredths	One-Thousandths	Ten-Thousandths	Hundred-Thousandths	One-Millionths
							.						

 DECIMAL PLACE VALUE CHART													
One Millions	Hundred Thousands	Ten Thousands	One Thousands	Hundreds	Tens	Ones	Decimal point ↓	Tenths	Hundredths	One-Thousandths	Ten-Thousandths	Hundred-Thousandths	One-Millionths
							.						

Rounding Decimals (A)

Round each decimal number to the nearest place indicated.

- | | | | | | |
|-----|--------|--------------|-----|--------|--------------|
| 1. | 0.43 | whole number | 11. | 7.865 | whole number |
| 2. | 6.02 | tenth | 12. | 5.2182 | thousandth |
| 3. | 6.651 | whole number | 13. | 5.6967 | thousandth |
| 4. | 0.202 | hundredth | 14. | 2.9 | whole number |
| 5. | 7.22 | whole number | 15. | 4.0 | whole number |
| 6. | 0.660 | tenth | 16. | 7.46 | tenth |
| 7. | 8.28 | tenth | 17. | 2.39 | tenth |
| 8. | 9.87 | whole number | 18. | 3.896 | whole number |
| 9. | 7.0760 | hundredth | 19. | 7.8143 | whole number |
| 10. | 3.629 | tenth | 20. | 9.3959 | hundredth |

How to Multiply Decimals

Just follow these steps:

- Multiply normally, ignoring the decimal points.
- **Then** put the decimal point in the answer - it will have as many decimal places as the two original numbers combined.

In other words, just count up how many numbers are after the decimal point in *both* numbers you are multiplying, then the answer should have that many numbers after *its* decimal point.

Example: Multiply 0.03 by 1.1

start with:	0.03×1.1
multiply without decimal points:	$3 \times 11 = 33$
0.03 has 2 decimal places ,	
and 1.1 has 1 decimal place ,	
so the answer has 3 decimal places:	0.033

Multiplying 3-Digit by 2-Digit Numbers with Various Decimal Places (A)

Name: _____

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Calculate each product.

$$\begin{array}{r} 68.2 \\ \times 8.4 \\ \hline \end{array}$$

$$\begin{array}{r} 630 \\ \times 1.2 \\ \hline \end{array}$$

$$\begin{array}{r} 16.0 \\ \times 36 \\ \hline \end{array}$$

$$\begin{array}{r} 5.52 \\ \times 0.25 \\ \hline \end{array}$$

$$\begin{array}{r} 32.3 \\ \times 26 \\ \hline \end{array}$$

$$\begin{array}{r} 7.91 \\ \times 0.19 \\ \hline \end{array}$$

$$\begin{array}{r} 26.3 \\ \times 7.8 \\ \hline \end{array}$$

$$\begin{array}{r} 3.07 \\ \times 19 \\ \hline \end{array}$$

$$\begin{array}{r} 63.2 \\ \times 8.5 \\ \hline \end{array}$$

$$\begin{array}{r} 0.394 \\ \times 70 \\ \hline \end{array}$$

$$\begin{array}{r} 55.8 \\ \times 9.4 \\ \hline \end{array}$$

$$\begin{array}{r} 596 \\ \times 3.6 \\ \hline \end{array}$$

$$\begin{array}{r} 940 \\ \times 8.2 \\ \hline \end{array}$$

$$\begin{array}{r} 203 \\ \times 42 \\ \hline \end{array}$$

$$\begin{array}{r} 0.707 \\ \times 0.97 \\ \hline \end{array}$$

$$\begin{array}{r} 906 \\ \times 64 \\ \hline \end{array}$$

$$\begin{array}{r} 310 \\ \times 1.8 \\ \hline \end{array}$$

$$\begin{array}{r} 520 \\ \times 0.92 \\ \hline \end{array}$$

$$\begin{array}{r} 131 \\ \times 0.41 \\ \hline \end{array}$$

$$\begin{array}{r} 6.00 \\ \times 5.1 \\ \hline \end{array}$$

$$\begin{array}{r} 0.913 \\ \times 56 \\ \hline \end{array}$$

$$\begin{array}{r} 12.8 \\ \times 3.8 \\ \hline \end{array}$$

$$\begin{array}{r} 52.2 \\ \times 2.3 \\ \hline \end{array}$$

$$\begin{array}{r} 0.394 \\ \times 76 \\ \hline \end{array}$$

$$\begin{array}{r} 0.411 \\ \times 0.35 \\ \hline \end{array}$$

Dividing Decimals

The trick is to get rid of the decimal point from the number we are dividing by.

How? We can "shift the decimal point" out of the way by multiplying by 10, as many times as we need to.

But we must do the **same thing** to both numbers in the division.

Example: 15 divided by 0.2

Let us multiply the 0.2 by 10, which shifts the decimal point out of the way:

$$0.2 \times 10 = 2$$

But we must **also** do it to the 15:

$$15 \times 10 = 150$$

So $15 \div 0.2$ has become $150 \div 2$ (they are **both** 10 times larger):

$$150 \div 2 = 75$$

And so the answer is:

$$\mathbf{15 \div 0.2 = 75}$$

Name

Date



DECIMAL DIVISION WITH 2DP SHEET 1

1) $7 \overline{)44.94}$

2) $4 \overline{)85.92}$

3) $6 \overline{)56.82}$

4) $4 \overline{)93.00}$

5) $5 \overline{)40.85}$

6) $9 \overline{)60.57}$

7) $3 \overline{)83.43}$

8) $4 \overline{)98.92}$

9) $6 \overline{)73.02}$

