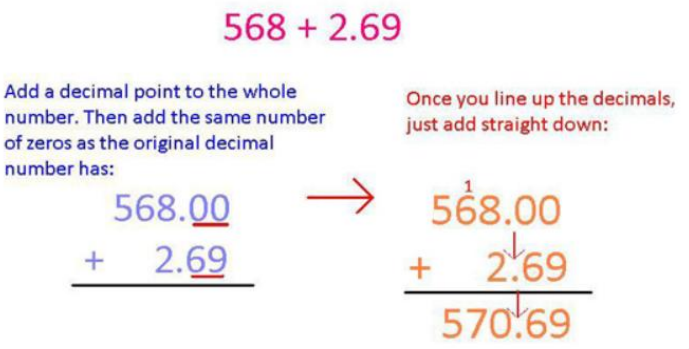
Decimals

Ex A. Addition and Subtraction

Note: When adding or subtracting decimals, you need to:

1. Line up the decimal point
2. Add zeros if needed.



Rewrite each problem vertically and solve.

1.42 + 2.157 =	**3.918 + 9.2 =**	**31.908 + 0.054 =**
72 + 8.039 =	**23.102 + 231.2 =**	**87.64 + 0.36 =**
0.73 – 0.02 =	**0.6 – 0.04 =**	**4.3 – 0.01 =**

Ex B. Converting Decimals to Fractions

Watch this youtube video to help you understand how to convert fractions to decimals and decimals to fractions - https://www.youtube.com/watch?v=19k7aNGnGd8

Change these fractions to decimals.
(To change a fraction to a decimal the denominator should be 10 or 100)

$\frac{1}{2}$ =	$\frac{13}{20}$ =	$\frac{3}{5}$ =	$\frac{19}{25}$ =
$\frac{1}{4}$ =	$\frac{9}{25}$ =	$\frac{17}{50}$ =	$\frac{6}{20}$ =
$8\frac{3}{25}$ =	$\frac{3}{4}$ =	$7\frac{1}{20}$ =	$\frac{4}{5}$ =
$\frac{17}{20}$ =	$\frac{1}{10}$ =	$\frac{9}{10}$ =	$\frac{9}{100}$ =

Change these decimals to fractions. (Reduce your answers to their lowest terms)

0.54 =	0.17 =	0.02 =	9.5 =
3.2 =	0.35 =	0.42 =	0.75 =
0.37 =	0.9 =	0.66 =	1.4 =
8.9 =	0.72 =	0.2 =	0.99 =

Ex C. Ordering Decimals

Let's look at this example.

Order these decimals from least to greatest: **3.87, 3.0875, 3.87502, 3.807**

1. Start by writing one decimal beneath the other in their original order.

3 . 8 7
3 . 0 8 7 5 0
3 . 8 7 5 0 2
3 . 8 0 7 0 0

2. You can fill in the blank spaces with zeros so that it will be easier to compare and order these decimals.
3.87000
3.08750
3.87502
3.80700

3. From least to greatest, we get: 3.08750, 3.80700, 3.87000, 3.87502

Write the numbers from smallest to largest.

1. 9.34 _____
   83.9 _____
   21.4 _____
   0.96 _____

2. 8.11 _____
   34.1 _____
   1.29 _____
   3.16 _____

3. 5.94 _____
   8.65 _____
   7.7 _____
   6.23 _____

4. 9.58 _____
   29.6 _____
   6.70 _____
   94.1 _____

5. 58.1 _____
   2.74 _____
   35.4 _____
   0.65 _____

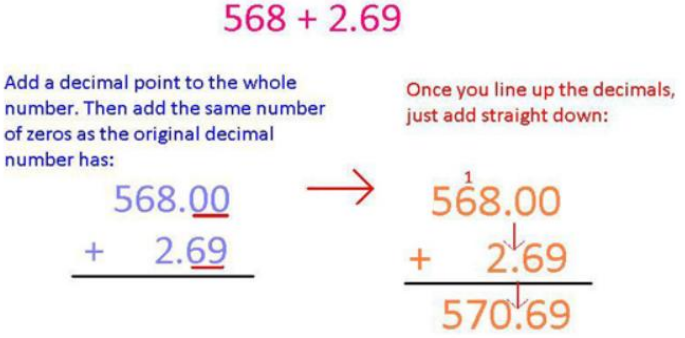
6. 7.30 _____
   0.28 _____
   0.01 _____
   3.63 _____

Answer Sheets - Decimals

Ex A. Addition and Subtraction

Note: When adding or subtracting decimals, you need to:

3. Line up the decimal point
4. Add zeros if needed.



Rewrite each problem vertically and solve.

1.42 + 2.157 = 1.420 + 2.157 3.577	3.918 + 9.2 = 3.918 + 9.200 13.118	31.908 + 0.054 = 31.908 + 00.054 31.962
72 + 8.039 = 72.000 + 08.039 80.039	23.102 + 231.2 = 023.102 + 231.200 254.302	87.64 + 0.36 = 87.64 + 00.36 88.00
0.73 – 0.02 = 0.73 – 0.02 0.71	0.6 – 0.04 = 0.60 – 0.06 0.56	4.3 – 0.01 = 4.30 – 0.01 4.29

Ex B. Converting Decimals to Fractions

Watch this youtube video to help you understand how to convert fractions to decimals and decimals to fractions - https://www.youtube.com/watch?v=19k7aNGnGd8

Change these fractions to decimals.
(To change a fraction to a decimal the denominator should be 10 or 100)

$\frac{1}{2} = \frac{5}{10} = 0.5$	$\frac{13}{20} = \frac{65}{100} = 0.65$	$\frac{3}{5} = \frac{6}{10} = 0.6$	$\frac{19}{25} = \frac{76}{100} = 0.76$
$\frac{1}{4} = \frac{25}{100} = 0.25$	$\frac{9}{25} = \frac{36}{100} = 0.36$	$\frac{17}{50} = \frac{34}{100} = 0.34$	$\frac{6}{20} = \frac{30}{100} = 0.3$
$8\frac{3}{25} = 8\frac{12}{100} = 8.12$	$\frac{3}{4} = \frac{75}{100} = 0.75$	$7\frac{1}{20} = 7\frac{5}{100} = 7.05$	$\frac{4}{5} = \frac{8}{10} = 0.8$
$\frac{17}{20} = \frac{85}{100} = 0.85$	$\frac{1}{10} = 0.1$	$\frac{9}{10} = 0.9$	$\frac{9}{100} = 0.09$

Change these decimals to fractions. (Reduce your answers to their lowest terms)

$0.54 = \frac{54}{100} = \frac{27}{50}$	$0.17 = \frac{17}{100}$	$0.02 = \frac{2}{100} = \frac{1}{50}$	$9.5 = 9\frac{5}{10} = 9\frac{1}{2}$
$3.2 = 3\frac{2}{10} = 3\frac{1}{5}$	$0.35 = \frac{35}{100} = \frac{7}{20}$	$0.42 = \frac{42}{100} = \frac{21}{50}$	$0.75 = \frac{75}{100} = \frac{3}{4}$
$0.37 = \frac{37}{100}$	$0.9 = \frac{9}{10}$	$0.66 = \frac{66}{100} = \frac{33}{50}$	$1.4 = 1\frac{4}{10} = 1\frac{2}{5}$
$8.9 = 8\frac{9}{10}$	$0.72 = \frac{72}{100} = \frac{18}{25}$	$0.2 = \frac{2}{10} = \frac{1}{5}$	$0.99 = \frac{99}{100}$

Ex C. Ordering Decimals

Let's look at this example.

Order these decimals from least to greatest: **3.87, 3.0875, 3.87502, 3.807**

4. Start by writing one decimal beneath the other in their original order.

3 . 8 7
3 . 0 8 7 5 0
3 . 8 7 5 0 2
3 . 8 0 7 0 0

5. You can fill in the blank spaces with zeros so that it will be easier to compare and order these decimals.

3.87000
3.08750
3.87502
3.80700

6. From least to greatest, we get: 3.08750, 3.80700, 3.87000, 3.87502

Write the numbers from smallest to largest.

1. 9.34 0.96
83.9 9.34
21.4 21.4
0.96 83.9

2. 8.11 1.29
34.1 3.16
1.29 8.11
3.16 34.1

3. 5.94 5.94
8.65 6.23
7.7 7.7
6.23 8.65

4. 9.58 6.70
29.6 9.58
6.70 29.6
94.1 94.1

5. 58.1 0.65
2.74 2.74
35.4 35.4
0.65 58.1

6. 7.30 0.01
0.28 0.28
0.01 3.63
3.63 7.30