

Sutton Maths Class

Year 5 - Week 1 - Fractions, Decimals and Percentages

Fraction	Decimal	Percentage
$\frac{1}{2}$	0.5	50%
$\frac{1}{4}$	0.25	25%
$\frac{1}{5}$	0.2	20%
$\frac{1}{10}$	0.1	10%
$\frac{1}{100}$	0.01	1%
$\frac{1}{8}$	0.125	12.5%
$\frac{1}{3}$	0.3	33.3%

Fractions to Decimals:

Using the above information, or otherwise, answer the following:

- Write $\frac{4}{5}$ as a decimal. *0.8*
- Write $\frac{2}{3}$ as a decimal. *0.66... or 0.6*
- Write $\frac{77}{100}$ as a decimal. *0.77*
- Write $\frac{24}{100}$ as a decimal. *0.24*
- Write $\frac{3}{5}$ as a decimal. *0.6*
- Write $\frac{8}{10}$ as a decimal. *0.8*
- Write $\frac{3}{8}$ as a decimal. *0.375*

8 Write $\frac{3}{4}$ as a decimal. *0.75*

9* Write $\frac{1}{9}$ as a decimal. *0.111... or 0.1*

Fractions to Percentages:

Using the above information, or otherwise, answer the following:

- Write $\frac{4}{5}$ as a percentage. *80%*
- Write $\frac{2}{3}$ as a percentage. *66.6% or 66 2/3%*
- Write $\frac{77}{100}$ as a percentage. *77%*
- Write $\frac{3}{5}$ as a percentage. *60%*
- Write $\frac{5}{8}$ as a percentage. *37.5%*
- Write $\frac{2}{10}$ as a percentage. *20%*

Decimals to Fractions:

- Write 0.8 as a fraction. $\frac{8}{10} = \frac{4}{5}$
- Write 0.2 as a fraction. $\frac{2}{10} = \frac{1}{5}$
- Write 0.7 as a fraction. $\frac{7}{10}$
- Write 0.35 as a fraction. $\frac{35}{100} = \frac{7}{20}$
- Write 0.105 as a fraction. $\frac{105}{1000} = \frac{21}{200}$
- Write 1.3 as a fraction. $\frac{13}{10}$

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Decimals to Percentages: \times by 100

1 Write 0.86 as a percentage. 86%

2 Write 0.75 as a percentage. 75%

3 Write 0.26 as a percentage. 26%

4 Write 0.88 as a percentage. 88%

5 Write 0.8 as a percentage. 80%

6 Write 0.7 as a percentage. 70%

7 Write 0.05 as a percentage. 5%

8* Write 0.555 as a percentage. 55.5%

9* Write 1.8 as a percentage. 180%

10* Write 0.005 as a percentage. 0.5%

Percentages to Fractions:

1 Write 50% as a fraction. $\frac{50}{100} = \frac{1}{2}$

2 Write 45% as a fraction. $\frac{45}{100} = \frac{9}{20}$

3 Write 52% as a fraction. $\frac{52}{100} = \frac{13}{25}$

4 Write 80% as a fraction. $\frac{80}{100} = \frac{8}{10} = \frac{4}{5}$

5 Write 1% as a fraction. $\frac{1}{100}$

6 Write 12% as a fraction. $\frac{12}{100} = \frac{6}{50} = \frac{3}{25}$

7* Write 120% as a fraction. $\frac{120}{100} = \frac{12}{10} = \frac{6}{5} = 1\frac{1}{5}$

8* Write 0.5% as a fraction. $\frac{5}{1000} = \frac{1}{200}$

Percentages to Decimals: \div by 100

1 Write 25% as a decimal. 0.25

2 Write 67% as a decimal. 0.67

3 Write 40% as a decimal. 0.4

4 Write 88% as a decimal. 0.88

5* Write 358% as a decimal. 3.58

Ordering Fractions, Decimals and Percentages:

1 Write in ascending order:

\checkmark \checkmark \checkmark \checkmark \checkmark
0.8, 0.85, 0.79, 0.08, 0.805
 $0.08, 0.79, 0.8, 0.805, 0.85$

2 Write in descending order:

\checkmark \checkmark \checkmark
0.1, 0.05, 0.12, 0.102
 $0.12, 0.102, 0.1, 0.05$

3 Write in ascending order:

$\frac{4}{5}, \frac{5}{8}, \frac{2}{3}$ $\frac{5}{8}, \frac{2}{3}, \frac{4}{5}$
 $0.8, 0.625, 0.666\dots$

4 Write in ascending order:

$\frac{3}{10}, \frac{1}{3}, \frac{2}{5} \Rightarrow \frac{9}{30}, \frac{10}{30}, \frac{12}{30}$
 $\frac{3}{10}, \frac{1}{3}, \frac{2}{5}$ $\frac{9}{30}, \frac{10}{30}, \frac{12}{30}$
already in order.

Write in descending order: $\frac{3}{10}, \frac{1}{3}, \frac{2}{5}$

40%, 42%, 40.9%, 49%

$49\%, 42\%, 40.9\%, 40\%$