

Some work on decimals

The red slides have all the
instructions

Revision – Remember decimals

- Reminder

- T U . $\frac{1}{10}$ $\frac{1}{100}$ $\frac{1}{1000}$

- The decimal point separates whole numbers and fractions

- $2\frac{1}{10} = 2.1$ $3\frac{2}{100} = 3.02$

Change these fractions to decimals

- $\frac{4}{10} =$ $\frac{7}{10} =$ $\frac{9}{10} =$ $\frac{8}{10} =$

- $\frac{34}{100} =$ $\frac{18}{100} =$ $\frac{9}{100} =$ $\frac{6}{100} =$

- $\frac{123}{1000} =$ $\frac{134}{1000} =$ $\frac{19}{1000} =$ $\frac{4}{1000} =$

- $\frac{4}{10} =$ $\frac{23}{100} =$ $\frac{7}{1000} =$ $\frac{19}{1000} =$

Now check your answers

- $\frac{4}{10} = 0.4$ $\frac{7}{10} = 0.7$ $\frac{9}{10} = 0.9$ $\frac{8}{10} = 0.8$
- $\frac{34}{100} = 0.34$ $\frac{18}{100} = 0.18$ $\frac{9}{100} = 0.09$ $\frac{6}{100} = 0.06$
- $\frac{123}{1000} = 0.123$ $\frac{134}{1000} = 0.134$ $\frac{19}{1000} = 0.019$ $\frac{4}{1000} = 0.004$
- $\frac{4}{10} = 0.4$ $\frac{23}{100} = 0.23$ $\frac{7}{1000} = 0.007$ $\frac{19}{1000} = 0.019$

Change these mixed fractions to decimals

- $3\frac{1}{10} =$

$7\frac{23}{100} =$

$9\frac{1}{10} =$

- $12\frac{13}{100} =$

$4\frac{9}{100} =$

$7\frac{123}{1000}$

- $4\frac{6}{100} =$

$5\frac{13}{100} =$

$2\frac{5}{1000}$

- $12\frac{56}{100} =$

$6\frac{12}{1000} =$

$3\frac{1}{10} =$

Now check your answers

- $3\frac{1}{10} = 3.1$ $7\frac{23}{100} = 7.23$ $9\frac{1}{10} = 9.1$
- $12\frac{13}{100} = 12.13$ $4\frac{9}{100} = 4.09$ $7\frac{123}{1000} = 7.123$
- $4\frac{6}{100} = 4.06$ $5\frac{13}{100} = 5.13$ $2\frac{5}{1000} = 2.005$
- $12\frac{56}{100} = 12.56$ $6\frac{12}{1000} = 6.012$ $3\frac{1}{10} = 3.1$

You must learn these fractions

- $\frac{1}{4} = 0.25$
- $\frac{2}{4} = \frac{1}{2} = 0.5$
- $\frac{3}{4} = 0.75$

- $\frac{1}{5} = 0.2$
- $\frac{2}{5} = 0.4$
- $\frac{3}{5} = 0.6$
- $\frac{4}{5} = 0.8$
- $\frac{5}{5} = 1$

Now do these

- $2\frac{1}{2} =$

$34\frac{1}{2} =$

$19\frac{1}{4} =$

- $17\frac{3}{4} =$

$21\frac{1}{5} =$

$19\frac{4}{5} =$

- $45\frac{3}{5} =$

$36\frac{1}{2} =$

$12\frac{3}{4} =$

- $15\frac{3}{5} =$

$17\frac{3}{4} =$

$5\frac{1}{4} =$

Check your answers

• $2\frac{1}{2} = 2.5$ $34\frac{1}{2} = 34.5$ $19\frac{1}{4} = 19.25$

• $17\frac{3}{4} = 17.75$ $21\frac{1}{5} = 21.2$ $19\frac{4}{5} = 19.8$

• $45\frac{3}{5} = 45.6$ $36\frac{1}{2} = 36.5$ $12\frac{3}{4} = 12.75$

• $15\frac{3}{5} = 15.6$ $17\frac{3}{4} = 17.75$ $5\frac{1}{4} = 5.25$

Now study these

- $\frac{1}{8} = 0.125$
- $\frac{2}{8} = \frac{1}{4} = 0.25$
- $\frac{3}{8} = 0.375$
- $\frac{4}{8} = 0.5$
- $\frac{5}{8} = 0.625$
- $\frac{6}{8} = \frac{3}{4} = 0.75$
- $\frac{7}{8} = 0.875$
- $\frac{8}{8} = 1$

Now try these

- $3\frac{1}{8} =$

$5\frac{2}{8} =$

$18\frac{3}{8} =$

- $5\frac{4}{8}$

$13\frac{1}{8} =$

$19\frac{5}{8} =$

- $23\frac{7}{8} =$

$16\frac{5}{8} =$

$14\frac{4}{8} =$

- $21\frac{5}{8} =$

$36\frac{6}{8} =$

$3\frac{7}{8} =$

Now check your answers

- $3\frac{1}{8} = 3.125$ $5\frac{2}{8} = 5.25$ $18\frac{3}{8} = 18.375$
- $5\frac{4}{8} = 5.5$ $13\frac{1}{8} = 13.125$ $19\frac{5}{8} = 19.625$
- $23\frac{7}{8} = 23.875$ $16\frac{5}{8} = 16.625$ $14\frac{4}{8} = 14.5$
- $21\frac{5}{8} = 21.625$ $36\frac{6}{8} = 36.75$ $3\frac{7}{8} = 3.875$

Write as a decimal

Examples

- $3 + \frac{1}{10} + \frac{5}{100} + \frac{1}{1000}$
- $= 3 + 0.1 + 0.05 + 0.001 = 3.151$

- $5 + \frac{4}{10} + \frac{16}{1000} + \frac{123}{1000}$
- $= 5 + 0.4 + 0.16 + 0.123 = 5.683$

Write as one decimal number

- $3 + \frac{1}{10} + \frac{6}{100} =$

- $5 + \frac{7}{10} + \frac{26}{100} =$

- $9 + \frac{18}{100} + \frac{6}{1000} =$

- $5 + \frac{4}{10} + \frac{16}{100} + \frac{125}{1000} =$

- $3 + \frac{19}{100} + \frac{19}{1000} =$

- $5 + \frac{4}{10} + \frac{16}{100} + \frac{123}{1000} =$

Now check your answers

- $3 + \frac{1}{10} + \frac{6}{100} = 3.16$
- $5 + \frac{7}{10} + \frac{26}{100} = 5.96$
- $9 + \frac{18}{100} + \frac{6}{1000} = 9.186$
- $5 + \frac{4}{10} + \frac{16}{100} + \frac{125}{1000} = 5.685$
- $3 + \frac{19}{100} + \frac{19}{1000} = 3.209$
- $5 + \frac{4}{10} + \frac{16}{100} + \frac{123}{1000} = 5.683$

Well Done

- Don't forget to learn the fractions you need to learn.
- However if you forget them you can \div the bottom number (denominator) into the top number (numerator) and this will also get the decimal for you
- *Example* $\frac{3}{4} = 3 \div 4 = 0.75$

Test that the dividing method works

- Try these by dividing the bottom number into the top. If you get lots of numbers after the decimal point just take the first 2 numbers. This will give you a close answer.

- $\frac{1}{7} = 1 \div 7 = 0.142857 = 0.14$

- $\frac{1}{6} = 1 \div 6 = 0.16666 = 0.16$

Now try these

- $\frac{2}{7} =$

$$\frac{5}{6} =$$

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

- $\frac{3}{4} =$

$$\frac{2}{9} =$$

$$\frac{4}{7} =$$

- $\frac{1}{7} =$

$$\frac{5}{9} =$$

$$\frac{7}{9} =$$

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

$$\frac{1}{2} =$$

$$\frac{1}{11} =$$

Check your answers

- $\frac{2}{7} = 0.28$

$$\frac{5}{6} = 0.83$$

$$\frac{1}{3} = 0.33$$

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

$$\frac{2}{9} = 0.22$$

$$\frac{4}{7} = 0.57$$

- $\frac{1}{7} = 0.14$

$$\frac{5}{9} = 0.55$$

$$\frac{7}{9} = 0.77$$

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

$$\frac{1}{2} = 0.5$$

$$\frac{1}{11} = 0.09$$

Very Well Done

- Don't forget to practise this Power Point a few time. It will help with decimals.