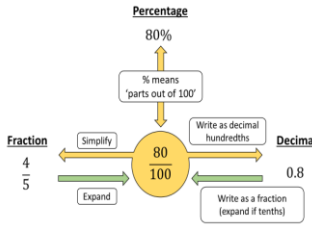


FRACTION DECIMALS PERCENTAGES CONVERSION

Keywords:	Numerator, denominator, divide, decimal place, percent, fraction, terminating, recurring, proportion, equivalent																						
Definition / Description:	Fractions , decimals and percentages are 3 different ways of expressing a proportion of the whole. Numerator : the top number in a fraction / Denominator : the bottom number in a fraction / Simplify : divide numerator and denominator by a common factor / Equivalent fractions: a fraction with the same value as another / Terminating decimal: one with a finite number of digits / Recurring decimal: one with an infinite number of digits																						
Knowledge points:	Convert between fraction, decimals and percentages	Compare value of fractions , decimals and percentages Convert all proportions to one form	Convert fractions into recurring decimals Do a simple division of numerator by denominator	Use algebraic methods to convert recurring decimals to fractions	Interpret fractions and percentages as operators Use of multipliers and divisors																		
Knowledge point examples:		<p>Convert each number to the same format: Decimals</p> <p>Place these in order from least to greatest.</p> <table style="width: 100%; text-align: center;"> <tr> <td>0.3</td> <td>25%</td> <td>$\frac{7}{25}$</td> </tr> <tr> <td>↓</td> <td>÷ 100</td> <td>↓ × 4</td> </tr> <tr> <td>0.3</td> <td>0.25</td> <td>$\frac{7}{25} = \frac{28}{100}$</td> </tr> <tr> <td>③</td> <td>①</td> <td>× 4 = 0.28</td> </tr> <tr> <td></td> <td></td> <td>②</td> </tr> </table> <p>List original numbers.</p> <table style="width: 100%; text-align: center;"> <tr> <td>25%</td> <td>$\frac{7}{25}$</td> <td>0.3</td> </tr> </table>	0.3	25%	$\frac{7}{25}$	↓	÷ 100	↓ × 4	0.3	0.25	$\frac{7}{25} = \frac{28}{100}$	③	①	× 4 = 0.28			②	25%	$\frac{7}{25}$	0.3	<p>Convert this fraction to a decimal using division.</p> $\frac{5}{9} = 5 \div 9$ $9 \overline{) 5.055555 \dots}$ $= 0.5555 \dots$ $= 0.\dot{5}$ <p>This is a recurring decimal.</p>	<p>Convert this decimal to a fraction.</p> $0.\dot{4}5$ <p>Let $x = 0.45454545 \dots$ Multiply by 100 so $100x = 45.454545 \dots$ Subtract x from $100x$ $100x = 45.4545$ $\underline{- x = 0.4545}$ $99x = 45$ $x = \frac{45}{99}$ Simplify $X = \frac{5}{11}$</p>	<p>Multiplying by $\frac{1}{5}$ is the same as dividing by 5</p> <p>To find 62% of 80, convert 62 % to decimal of 0.62 then multiply $0.62 \times 80 = 49.6$</p>
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Linked Knowledge Maps	Fractions / Percentages																						