



Vocabulary List

AS91026 Apply numeric reasoning in solving problems | Te whakamahi whakaaro tau whaitake hei whakaoti rapanga (version 3)

| Term | Definition | Example |
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| BEMA | <p>BEMA stands for:</p> <ul style="list-style-type: none">BracketsExponentsMultiplication / DivisionAddition / Subtraction <p>It describes the order of operations that you should use when doing calculations. Calculate the expression in the brackets first, then exponents, then multiplication or division, followed by addition or subtraction.</p> | |
| Compound interest (CI) | <p>Compound interest is the addition of interest to the amount of a loan or deposit and is the result of reinvesting interest instead of paying it out. Interest in the next period is earned on the amount plus the accumulated interest.</p> | <p>Over 3 years, the CI for \$2000 at a rate of 1.5% is:</p> $CI = 2000 \left(1 + \frac{1.5}{100}\right)^3$ <p>CI = \$2,091.35</p> |



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| | $CI = P \left(1 + \frac{r}{100}\right)^t$ <p>Where</p> <p>P = principal amount</p> <p>r = interest rate %</p> <p>t = time in years</p> | |
| Decimal fraction | A decimal fraction is a fraction whose denominator is 10 or a multiple of 10. | 0.375 is $\frac{375}{1000}$ |
| Decimal Place | A decimal place is the position of a digit to the right of a decimal point. | 0.23 – 3 is the second digit to after the decimal point |
| Denominator | The denominator of a fraction is the number at the bottom | The denominator of the fraction $\frac{3}{4}$ is 4 |
| Exchange rate | The exchange rate is the value of one currency for the purpose of conversion to another. | 1 \$NZ = 0.92 \$AUS |
| Factor | A factor is a smaller number that can be divided by a larger number with no remainder. | 1, 2, 3 and 6 are factors of 6 |
| Fraction | A fraction is a number that represents a part of a whole. | $\frac{2}{5}$ is 2 parts out of 5 parts Or 2 parts per 5 parts |
| Highest common factor (HCF) | The Highest common factor of numbers is the largest factor of all the numbers. | 3 is the HCF of 6, 9 and 12 |
| Interest rate | The interest rate is the amount a lender charges for the use of his money. | 0.25 is an interest rate of a quarter of the whole |



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| Lowest common multiple (LCM) | The Lowest common multiple of numbers is the smallest multiple of all the numbers. | 24 is the LCM of 2, 8 and 12 |
| Multiple | A multiple is the result of multiplying a number by another number. | 6, 12 and 18 are multiples of 6 |
| Numerator | The numerator of a fraction is the number at the top | The numerator of the fraction $\frac{3}{4}$ is 3 |
| Percentage (%) | Percentage (%) means parts per 100. | 60% means $\frac{60}{100}$ |
| Prime number | A prime number is a number that has only two factors: 1 and itself. | 2, 3 and 5 are prime numbers |
| Proportion | Proportion indicates that two ratios are equal. | $\frac{1}{3} = \frac{2}{6} = \frac{3}{9}$ |
| Rate | A rate is a comparison between two measurements. Rates often use the word "per". | The number of kilometres travelled per hour (speed) or the number of heart beats a person has per minute (pulse). |
| Ratio | A ratio compares values: it shows the relative sizes of two or more values. | 3 : 5 3 parts and 5 parts of 8 in total |
| Significant figure | Significant figures are the number of digits in a value. We start counting significant figures at the first non-zero digit. | 10.43 has 4 significant digits |
| Simple interest (SI) | Simple interest is a way to calculate interest on a loan or an investment. | SI = P x rate x time \$2000 x 0.015 x 3 years = \$90 |