

$$\text{diii.) } \frac{1100}{22,299} \times \frac{100}{1}$$

Laws of indices

①

2, 3, 4, 5, 6, 10, 11

③

2, 3, 6, 8, 12

Laws of indices ex $(27x^9)^{2/3}$

Solving $3^{4x} = 81^{(2-x)}$

- Factorization
1. Simple
 2. grouping
 3. Difference of two squares
 4. quadratic

Change of subject of formula

$$\text{ex } M = \frac{5n+3}{7-2n}$$

Simplify algebraic fractions
- addition, subtraction

Solving algebraic fractions

$$\frac{5}{4(x-7)} + \frac{6}{5} = -\frac{1}{2}$$

Solving simultaneous eqn.

Converting units

Standard/Scientific notation

ex. $0.00002 = 2.0 \times 10^{-5}$

$16000000 = 1.6 \times 10^7$

Calculation in scientific notation

$3.0 \times 10^6 \times 1.6 \times 10^7$

$2.3 \times 10^{-4} + 5.8 \times 10^{-2}$

Ratio & proportion

Profit percentage

Volume of prism

Example given the volume and expected to find height or other dimension of container

Trigonometry

Angle of Elevation & depression
Bearing

Trig Ratios

Pythagoras Theorem

Gradient of line

-Coordinate geometry
perpendicular lines
parallel lines

Relation of the above gradients

Expressing fractions as percent

Solving operations in fractions ex. $\frac{5}{6} + \frac{1}{8} - \frac{1}{14}$

Rounding & standard form

Limits of accuracy : upper & lower bounds

Variation : Direct & inverse

Increase & Decrease percentage

Original price/value

Properties of angles :- Triangles, parallel lines & a transversal.

Substitution = algebra

Absolute value ex. $|2x-1| = |5x+3|$

Surds ex. $(3+\sqrt{x})(3\sqrt{x}+5) = 2(x+5)$

Similar figures

Scale factor

Area factor

Volume factor

Solids

- Surface area

- Volume

Factorization

Transformational Geometry

Rotation, reflection, Enlargements Translation.