Contents

1 algebra

1.1 wallace

1.1.1 distributive property

$$\textbf{distributive property} : a(b+c) = ac + bc$$

1.1.2 slope

$$\textbf{slope} = m = \frac{\textbf{rise}}{\textbf{run}} = \frac{y_2 - y_1}{x_2 - x_1}$$

1.1.3 properties of exponents

$a^{m+2}a^n + 2 = a^{m+n} \quad (\text{ab})^m = a^m b^m \quad \frac{a^m}{/}a^n = a^{m-n}$

$(a/b)^m = \frac{a^m}{b^m} \qquad a^{-m} = \frac{1}{a^m} \qquad \frac{1}{a^{-m}} = a^m$

$(a^m)^n = a^m n \qquad a^0 = 1 \qquad \left(\frac{a}{b}\right)^{-m} = \frac{b^m}{a^m}$

1.1.4 scientific notation

$\frac{\frac{44}{2}}{22^2}$

$$\textbf{sicentific notation} : a \times 10^b \text{ where } 1 \leqslant a < 10$$

2 geometry