

DT Math's Equation Sheet

Density Equation

$$\text{Density} \left(\frac{kg}{m^3} \right) = \frac{\text{mass (kg)}}{\text{volume (m}^3\text{)}}$$

Volume equations

$$\text{Volume (Cylinder)} = \pi r^2 h \quad (r = \text{radius}, h = \text{height})$$

$$\text{Volume (Sphere)} = \frac{4}{3} \pi r^3$$

$$\text{Volume (Cube)} = \text{length} \times \text{width} \times \text{height}$$

Circumference of Circle equations

$$C = \pi d \text{ or } 2\pi r \quad (d = \text{diameter})$$

$$\text{Diameter} = 2 \times \text{radius}$$

Area Equations

$$\text{Area (Circle)} = \pi r^2$$

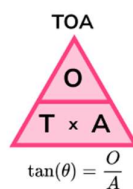
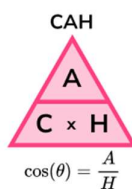
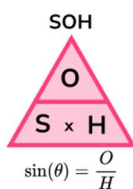
$$\text{Area (Right angled triangle)} = \frac{1}{2} \times \text{base} \times \text{height}$$

$$\text{Area (None right angled triangle)} = \frac{1}{2} \times a \times b \times \sin(c)$$

Histogram Equation

$$\text{Frequency (Area)} = \text{class width} \times \text{frequency density}$$

Trigonometric Identities (SOHCAHTOA)



Probability

$$\text{For mutually exclusive events: } P(A \text{ or } B) = P(A) + P(B)$$

$$\text{For independent events: } P(A \text{ and } B) = P(A) \times P(B)$$

