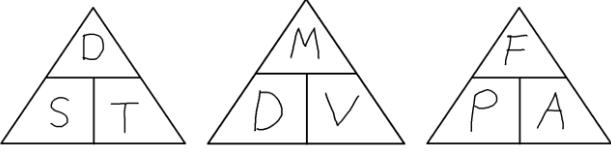
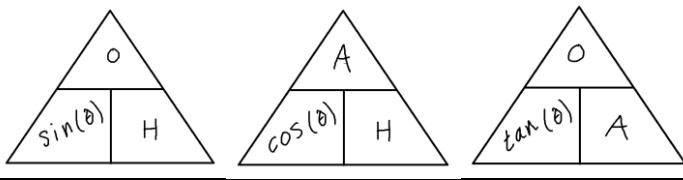
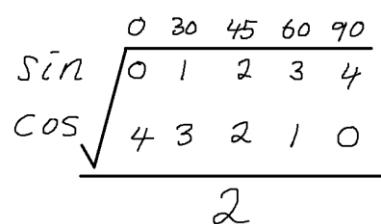


GCSE Formulae to Remember

| | |
|---------------------------------|--|
| Area of a Circle | $A = \pi r^2$ |
| Circumference of a Circle | $C = 2\pi r$ or $C = \pi d$ |
| Area of a Sector | $A = \frac{\theta}{360} \times \pi r^2$ |
| Arc Length | $C = \frac{\theta}{360} \times 2\pi r$ or $C = \frac{\theta}{360} \times \pi d$ |
| Volume of a Prism | Area of Cross Section x Length |
| Volume of a Pyramid | $\frac{\text{Volume of Prism}}{3}$ |
| Speed, Density and Pressure |  |
| Pythagoras (Long Side) | Square Square Add Square Root |
| Pythagoras (Short Side) | Square Square Subtract Square Root |
| SOH CAH TOA |  |
| Sine Rule (Length) | $\frac{a}{\sin(A)} = \frac{b}{\sin(B)}$ |
| Sine Rule (Angle) | $\frac{\sin(A)}{a} = \frac{\sin(B)}{b}$ |
| Cosine Rule (Length) | $a^2 = b^2 + c^2 - 2bc \cos(A)$ |
| Cosine Rule (Angle) | $\cos(A) = \frac{b^2 + c^2 - a^2}{2bc}$ |
| Area of any Triangle | $A = \frac{1}{2}ab \sin(C)$ |
| The Quadratic Formula | $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ |
| Trig (Sin Cos Tan) Exact Values |  |
| Equation of a Line | $y = mx + c$ |
| Gradient between 2 points | $\frac{y_2 - y_1}{x_2 - x_1}$ |
| Midpoint of 2 points | $\frac{x_2 + x_1}{2}, \frac{y_2 + y_1}{2}$ |