

#### Quadratic Formula:

$$x = (-b \pm \sqrt{(b^2 - 4ac)}) / 2a$$



# Area under a graph (Trapezium Rule): 1/2 (a+b)h



#### Area of a Triangle:

1/2 × base × height



## Area of a Trapezium: 1/2 (a+b)h



#### Area of a Circle:





## Circumference of a Circle: $2\pi r$ or $\pi d$



#### Pythagoras' Theorem:

$$a^2 + b^2 = c^2$$



#### **Trigonometry Ratios:**

```
\sin \theta = \text{opposite/hypotenuse},
\cos \theta = \text{adjacent/hypotenuse},
\tan \theta = \text{opposite/adjacent}
```



# Prism Volume: area of cross-section × length



#### Sphere Volume:

 $(4/3)\pi r^3$ 



#### Cone Volume:

 $(1/3)\pi r^2h$ 



#### Cylinder Volume:

πr<sup>2</sup>h



#### Surface Area of Sphere:

 $4\pi r^2$ 



# Mean: (sum of values) / (number of values)



## Probability: favourable outcomes / total outcomes



### Speed: distance / time



### Density: mass / volume



### Pressure: force / area