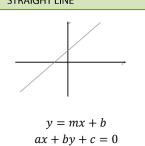
# **GRAPHS**

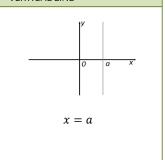
## **BASIC CURVES AND EQUATIONS**

#### STRAIGHT LINE

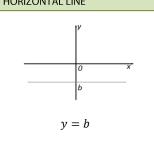


 $y - y_1 = m(x - x_1)$ 

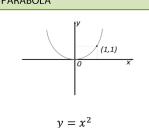
#### VERTICAL LINE



#### HORIZONTAL LINE

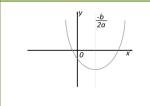


#### PARABOLA



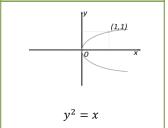
$$v = x^2$$

#### PARABOLA

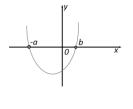


$$y = ax^2 + bx + c$$
Axis of symmetry at:  $x = -\frac{b}{2a}$ 

#### **PARABOLA**

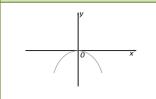


#### **PARABOLA**



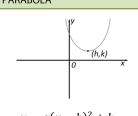
$$y = (x + a)(x - b)$$

#### PARABOLA



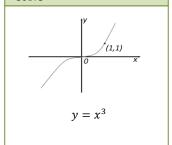
$$y = -x^2$$

#### PARABOLA

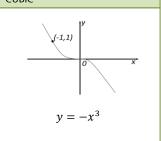


$$y = a(x - h)^2 + k$$

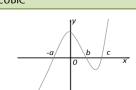
#### **CUBIC**



#### **CUBIC**

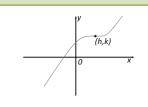


#### **CUBIC**



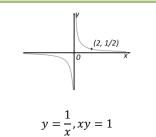
$$y = (x+a)(x-b)(x-c)$$

#### CUBIC

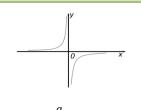


 $y = a(x - h)^3 + k$ 

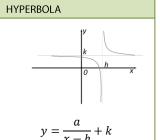
### HYPERBOLA



### HYPERBOLA



$$y = -\frac{a}{x}, xy = -a$$



### MATHS REFERENCE SHEET COLLECTION

A reference sheet for the hawkermaths.com senior maths program

**Mathematical Applications Mathematical Methods Specialist Mathematics** 

