Higher Maths Key Knowledge

Exact Values

f(x)	0	30	45	60	90	180
Sin(x)						
Cos(x)						
Tan(x)						

Radian to Degrees: Complete the table

Radians	Degrees		
π			
	90°		
	45°		
π/3			
π/6			

Straight Line

Gradient between two points:

General Formula for straight line:

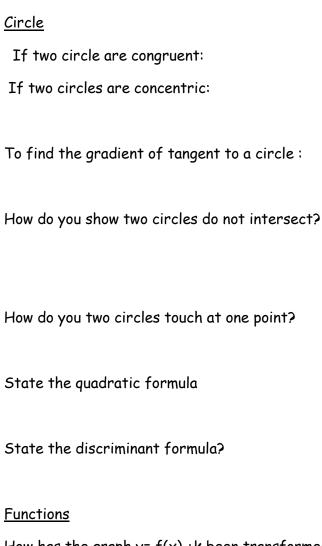
Formula links gradient and angle with the x axis:

If M_1 is Perpendicular to M_2 then $M_1 \times M_2$ =

How can find distance between two points A (x_1, y_1) and B (x_2, y_2)

What the two properties of a

- a) Perpendicular Bisector:
- b) Median:
- c) Altitude:



How has the graph y = f(x) + k been transformed?

How has the graph y = f(x+k) been transformed?

How has the graph y = kf(x) been transformed?

How has the graph y = f(kx) been transformed?

How has the graph y = -f(x) been transformed?

How has the graph y = f(-x) been transformed?

If f(q(x) = x then the functions are _____

Calculus: To find the gradient of tangent at values x: Turning points occur when: An increasing function is when? An decreasing function is when? How find the area between two curves? Wave Function: In the wave function what is the formula for k? In the wave function what is the formula for a? Logs What is the value of log 1 = What two coordinates will an exponential graph of base a pass through? What two coordinates will a logarithmic graph of base a pass through? Examples log a + log b =log a - log b =

2 log a =

What is the inverse function of In (natural log)?