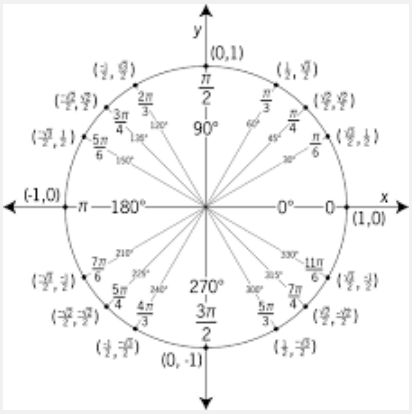
6 Trignometric Functions

Sin £ = o/h	Csc £ = h/o
Tan £ = o/a	Cot £ = a/o
Cos £ = a/h	Sec £ = h/a

General Definitions of the 6 Trig Functions

Sin £ = y/r	Csc £ = r/y
Cos £ = x/r	Sec £ = r/x
Tan £ = y/x	Tan £ = x/y

Unit Circle



Vocabulary

Initial Side The fixed ray of an angle

Terminal Side The rotated ray of an angle

Standard Position Angle whose vertex is on the origin and initial side lies on the x-axis

Coterminal Two angles that have the same terminal side. Coterminal = `angle +/- [multiple of 360]`

Radian The measure of an angle in standard position whose terminal side intercepts an arc of length *r*

Sector A section of a circle bound by two radii

Central Angle The internal angle of a sector

Reference Angle the angle formed by the terminal side of another angle and the x-axis

Arc Length and Area of a Sector

Arc Length

> *s = rß*

Area

> *0.5 **x** r^2 **x** ß*

Degrees to Radians

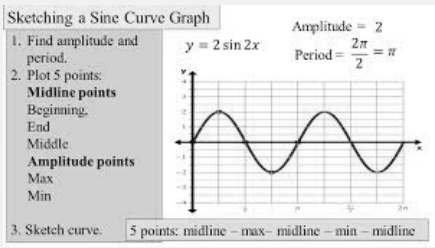
Degrees to Radians

> Degree * [(πradians)/180]

Radians to Degrees

> Radian* [180/(πradians)]

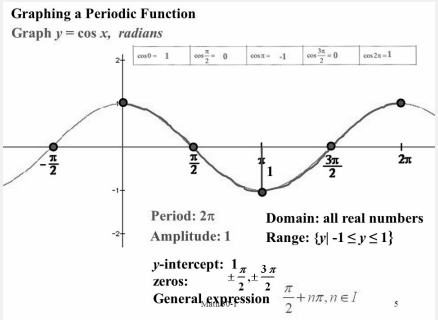
Sine Functions



Amplitude = |a|

Period = (2π)÷|b|

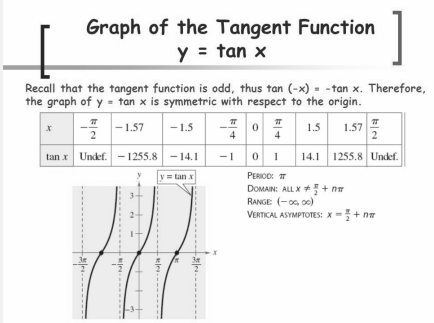
Graphing Cosine Functions



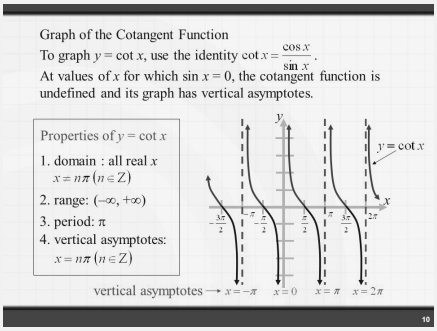
Amplitude = |a|

Period = (2π) |b|

Graphing a Tangent Function



Graphing a Cotangent Function



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