Lycée secondaire Ibn Rochd		2013 - 2014
Épreuve : Mathématiques	Formulaire de trigonométrie	
Prof : MAATALLAH	Le 11 - 12 - 2013	Classe : 3 M

$Cos(\frac{\pi}{2} - x) = sin(x)$

$Cos(\frac{\pi}{2} + x) = -sin(x)$

$sin(\frac{\pi}{2} - x) = cos(x)$

$sin(\frac{\pi}{2} + x) = cos(x)$

$cos(-x) = cos(x)$

$sin(-x) = -sin(x)$

$cos(\pi - x) = -cos(x)$

$cos(\pi + x) = -cos(x)$

$sin(\pi - x) = sin(x)$

$sin(\pi + x) = -sin(x)$

$Cos(a+b) = cos(a)cos(b) - sin(a)sin(b)$

$Cos(a-b) = cos(a)cos(b) + sin(a)sin(b)$

$Sin(a+b) = sin(a)cos(b) + sin(b)cos(a)$

$Sin(a-b) = sin(a)cos(b) - sin(b)cos(a)$

$Sin(2x) = 2sin(x)cos(x)$

$Cos(2x) = cos^2(x) - sin^2(x) = 2cos^2(x) - 1 = 1 - 2sin^2(x)$

$cos^2(x) = \frac{1+cos(2x)}{2}$ et $sin^2(x) = \frac{1-cos(2x)}{2}$

$Cos(a).cos(b) = \frac{1}{2}[cos(a+b) + cos(a-b)]$

$sin(a).sin(b) = \frac{1}{2}[cos(a-b) - cos(a+b)]$

$Sin(a).cos(b) = \frac{1}{2}[sin(a+b) + sin(a-b)]$

$a\cos(\alpha x) + b\sin(\alpha x) = r\cos(\alpha x - \varphi)$

$r = \sqrt{a^2+b^2}$ et $cos(\varphi) = \frac{a}{r}, sin(\varphi) = \frac{b}{r}$