Goniometrische formules

Goniometrische formules om te herleiden en/of vergelijkingen op te lossen:

Symmetrieformules	Verbanden tussen sin en cos
$\sin(-\alpha) = -\sin(\alpha)$ $\cos(-\alpha) = \cos(\alpha)$ $\tan(-\alpha) = -\tan(\alpha)$ $\sin(\pi - \alpha) = \sin(\alpha)$ $\cos(\pi - \alpha) = -\cos(\alpha)$ $\tan(\pi - \alpha) = -\tan(\alpha)$	$\sin\left(\frac{1}{2}\pi - \alpha\right) = \cos(\alpha)$ $\cos\left(\frac{1}{2}\pi - \alpha\right) = \sin(\alpha)$ $\sin^2(\alpha) + \cos^2(\alpha) = 1$
Somformules	**Verdubbelingsformules**
$\sin(\alpha + \beta) = \sin(\alpha) \cdot \cos(\beta) + \cos(\alpha) \cdot \sin(\beta)$ $\sin(\alpha - \beta) = \sin(\alpha) \cdot \cos(\beta) - \cos(\alpha) \cdot \sin(\beta)$ $\cos(\alpha + \beta) = \cos(\alpha) \cdot \cos(\beta) - \sin(\alpha) \cdot \sin(\beta)$ $\cos(\alpha - \beta) = \cos(\alpha) \cdot \cos(\beta) + \sin(\alpha) \cdot \sin(\beta)$	$\sin(2\alpha) = 2\sin(\alpha)\cos(\alpha)$ $\cos(2\alpha) = \cos^2(\alpha) - \sin^2(\alpha)$ $\cos(2\alpha) = 2\cos^2(\alpha) - 1$ $\cos(2\alpha) = 1 - 2\sin^2(\alpha)$
Formule voor *a* sin(*x*) plus *b* cos(*x*)	
$a \cdot \sin(x) + b \cdot \cos(x) = \sqrt{a^2 + b^2}\sin(x + \beta)$ waarin $\tan(\beta) = \frac{b}{a}$	

meer info