**General Solutions of Trigonometric Equations**

* Find one solution that satisfies the trig function
* Find any ‘symmetric’ solutions that satisfy the trig function
* Generalise your solution(s) to an expression (or expressions) in *n* that give all possible solutions to the trig function
* Rearrange your expression(s) in terms of *x*, θ etc

Cosine

|  |  |
| --- | --- |
| $$θ=360n\pm α$$ | $$θ=2nπ\pm α$$ |

Sine

|  |  |
| --- | --- |
| $$θ=360n+α$$$$θ=360n+\left(180-α\right)$$ | $$θ=2nπ+α$$$$θ=2nπ+\left(π-α\right)$$ |

Tangent

|  |  |
| --- | --- |
| $$θ=180n+α$$ | $$θ=nπ+α$$ |