## **Small Angle Approximations**

## What counts as small?

There is no hard and fast rule as to what counts as small, however, generally angles  $\leq 0.2$  rad or  $\leq 12^\circ$  can be considered small.

## The Approximations

 $\sin heta pprox heta$ 

an hetapprox heta

$$\cos hetapprox 1-rac{ heta^2}{2}$$