

Sin, cos, tan of angles in radians

Reminder of laws from Year 1:

- $\sin(x) = \sin(180 - x)$
- $\cos(x) = \cos(360 - x)$
- \sin, \cos repeat every 360° but \tan every 180°

In terms of radians:

- $\sin(x) =$
- $\cos(x) =$
- \sin, \cos repeat every _____ but \tan every _____.

To find sin/cos/tan of a '**common**' angle in radians without using a calculator, it is easiest to just **convert to degrees first**.

Examples

1. $\cos\left(\frac{4\pi}{3}\right) =$

2. $\sin\left(-\frac{7\pi}{6}\right) =$

“Use of Technology” :

To find $\cos\left(\frac{4\pi}{3}\right)$ directly using your calculator, you need to switch to radians mode. Press *SHIFT* → *SETUP*, then *ANGLE UNIT*, then *Radians*. An *R* will appear at the top of your screen, instead of *D*.