

MATH 1540 Fall 2018

Quiz 1

① Convert 32° to radians

Solution:

$$32^\circ = (32^\circ) \left(\frac{2\pi \text{ rad}}{360^\circ} \right)$$

$$= \frac{32\pi}{180} \text{ rad}$$

$$= \frac{16\pi}{90} \text{ rad}$$

$$= \frac{8\pi}{45} \text{ rad}$$

② Convert $\frac{1}{2}$ rad to degrees.

Solution:

$$\frac{1}{2} \text{ rad} = \left(\frac{1}{2} \text{ rad} \right) \left(\frac{360^\circ}{2\pi \text{ rad}} \right)$$

$$= \frac{360^\circ}{4\pi}$$

$$= \frac{90^\circ}{\pi}$$