Intellichoice Math

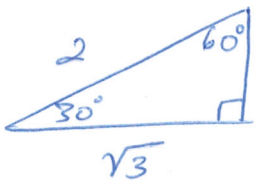
key

Trigonometry HW

I suggest memorizing the following values.

① $\sin(30°) = \frac{1}{2}$

Hint: "SohCahToa"



$\Rightarrow \sin 30° = \frac{\text{opposite}}{\text{hypotenuse}} = \frac{1}{2}$

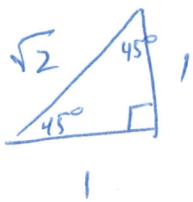
② $\cos(60°) = \frac{1}{2}$

Hint: "SohCahToa"

Use the triangle above.

③ $\tan(45°) = 1$

Hint: "SohCahToa"



④ $\sin(60°) = \frac{\sqrt{3}}{2}$

⑤ $\cos(30°) = \frac{\sqrt{3}}{2}$

⑥ $\tan(30°) = \frac{\sqrt{3}}{3}$ (or $\frac{1}{\sqrt{3}}$)

⑦ $\tan(60°) = \sqrt{3}$

⑧ $\sin(45°) = \frac{\sqrt{2}}{2}$

(9) $\cos(45°) = \frac{\sqrt{2}}{2}$

Convert from degrees to radians:

(10) $90° = \frac{\pi}{2}$ radians

Hint: There are 2π radians in $360°$.

(11) $180° = \pi$ radians

(12) $45° = \frac{\pi}{4}$ radians

(13) $270° = \frac{3\pi}{2}$ radians

(14) $-720° = -4\pi$ radians

Convert from radians to degrees:

(15) $3\pi = 540^\circ$

(16) $\frac{\pi}{2} = 90^\circ$

(17) $\frac{4\pi}{3} = 240^\circ$

(18) $-\frac{\pi}{4} = -45^\circ$

(19) $\frac{1}{\pi} = \frac{1}{\pi \text{ radians}} \quad \frac{180^\circ}{\pi \text{ radians}} = \frac{180^\circ}{\pi^2}$