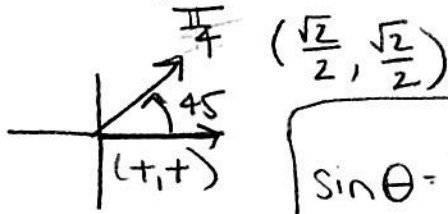


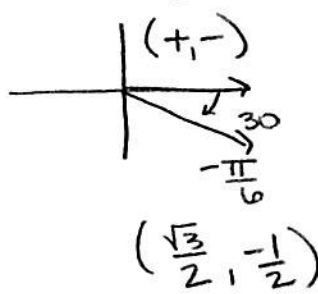
Evaluate the sine, cosine, and tangent of the real number.

1. $t = \frac{\pi}{4} \rightarrow 45^\circ$



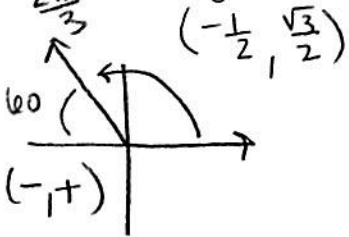
$$\begin{aligned} \sin \theta &= \sqrt{2}/2 \\ \cos \theta &= \sqrt{2}/2 \\ \tan \theta &= 1 \end{aligned}$$

2. $t = -\frac{\pi}{6} \rightarrow -30^\circ$



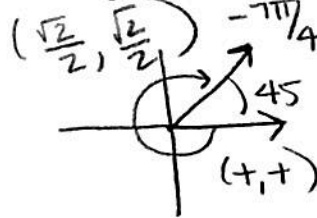
$$\begin{aligned} \sin \theta &= -\frac{1}{2} \\ \cos \theta &= \sqrt{3}/2 \\ \tan \theta &= -\frac{\sqrt{3}}{3} \end{aligned}$$

3. $t = \frac{2\pi}{3} \rightarrow 120^\circ$



$$\begin{aligned} \sin \theta &= \sqrt{3}/2 \\ \cos \theta &= -1/2 \\ \tan \theta &= -\sqrt{3} \end{aligned}$$

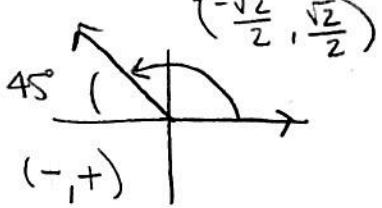
4. $t = -\frac{7\pi}{4} \rightarrow -315^\circ$



$$\begin{aligned} \sin \theta &= \sqrt{2}/2 \\ \cos \theta &= \sqrt{2}/2 \\ \tan \theta &= 1 \end{aligned}$$

Evaluate the six trigonometric functions of the real number.

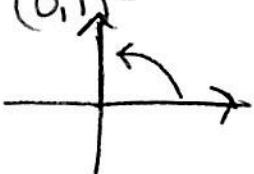
5. $t = \frac{3\pi}{4} \rightarrow 135^\circ$



$$\frac{2}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{2\sqrt{2}}{2} = \sqrt{2}$$

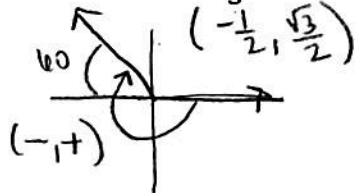
$$\begin{aligned} \sin \theta &= \sqrt{2}/2 & \csc \theta &= -\sqrt{2} \\ \cos \theta &= -\sqrt{2}/2 & \sec \theta &= -\sqrt{2} \\ \tan \theta &= -1 & \cot \theta &= -1 \end{aligned}$$

6. $t = \frac{\pi}{2} \rightarrow 90^\circ$



$$\begin{aligned} \sin \theta &= 1 & \csc \theta &= 1 \\ \cos \theta &= 0 & \sec \theta &= \text{und.} \\ \tan \theta &= \text{und.} & \cot \theta &= 0 \end{aligned}$$

7. $t = -\frac{4\pi}{3} \rightarrow -240^\circ$



$$\frac{2}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{2\sqrt{3}}{3}$$

$$\begin{aligned} \sin \theta &= \sqrt{3}/2 & \csc \theta &= \frac{2\sqrt{3}}{3} \\ \cos \theta &= -\frac{1}{2} & \sec \theta &= -2 \\ \tan \theta &= -\sqrt{3} & \cot \theta &= -\frac{\sqrt{3}}{3} \end{aligned}$$