$$e^{i\pi} = (-1, 0) = -1$$

$$e^{i\frac{\pi}{2}} = (0, 1) = i$$

$$e^{i\frac{\pi}{3}} = \left(\frac{1}{2}, \frac{\sqrt{3}}{2}\right) = \frac{1}{2} + \frac{\sqrt{3}}{2}i$$

$$e^{i0\pi} = e^{i2\pi} = (1, 0) = 1$$

$$x$$
The unit circle
$$e^{i\frac{7\pi}{4}} = e^{-i\frac{\pi}{4}} = \left(\frac{\sqrt{2}}{2}, -\frac{\sqrt{2}}{2}\right) = \frac{\sqrt{2}}{2} - \frac{\sqrt{2}}{2}i$$