

# Unit circle values

| Degrees | Radians   | sin           | cos           | tan           |
|---------|-----------|---------------|---------------|---------------|
| 0       | 0         | 0             | 1             | 0             |
| 30      | $\pi/6$   | $1/2$         | $\sqrt{3}/2$  | $\sqrt{3}/3$  |
| 45      | $\pi/4$   | $\sqrt{2}/2$  | $\sqrt{2}/2$  | 1             |
| 60      | $\pi/3$   | $\sqrt{3}/2$  | $1/2$         | $\sqrt{3}$    |
| 90      | $\pi/2$   | 1             | 0             | —             |
| 120     | $2\pi/3$  | $\sqrt{3}/2$  | $-1/2$        | $-\sqrt{3}$   |
| 135     | $3\pi/4$  | $\sqrt{2}/2$  | $-\sqrt{2}/2$ | -1            |
| 150     | $5\pi/6$  | $1/2$         | $-\sqrt{3}/2$ | $-\sqrt{3}/3$ |
| 180     | $\pi$     | 0             | -1            | 0             |
| 210     | $7\pi/6$  | $-1/2$        | $-\sqrt{3}/2$ | $\sqrt{3}/3$  |
| 225     | $5\pi/4$  | $-\sqrt{2}/2$ | $-\sqrt{2}/2$ | 1             |
| 240     | $4\pi/3$  | $-\sqrt{3}/2$ | $-1/2$        | $\sqrt{3}$    |
| 270     | $3\pi/2$  | -1            | 0             | —             |
| 300     | $5\pi/3$  | $-\sqrt{3}/2$ | $1/2$         | $-\sqrt{3}$   |
| 315     | $7\pi/4$  | $-\sqrt{2}/2$ | $\sqrt{2}/2$  | -1            |
| 330     | $11\pi/6$ | $-1/2$        | $\sqrt{3}/2$  | $-\sqrt{3}/3$ |

## Notes