

$$\begin{aligned} 1 \text{ a } \quad 720^\circ &= \frac{720 \times \pi}{180} \\ &= 4\pi \end{aligned}$$

$$\begin{aligned} \text{b } \quad 540^\circ &= \frac{540 \times \pi}{180} \\ &= 3\pi \end{aligned}$$

$$\begin{aligned} \text{c } \quad -450^\circ &= -\frac{450 \times \pi}{180} \\ &= -\frac{5\pi}{2} \end{aligned}$$

$$\begin{aligned} \text{d } \quad 15^\circ &= \frac{15 \times \pi}{180} \\ &= \frac{\pi}{12} \end{aligned}$$

$$\begin{aligned} \text{e } \quad -10^\circ &= \frac{-10 \times \pi}{180} \\ &= -\frac{\pi}{18} \end{aligned}$$

$$\begin{aligned} \text{f } \quad -315^\circ &= \frac{315 \times \pi}{180} \\ &= -\frac{7\pi}{4} \end{aligned}$$

$$\begin{aligned} 2 \text{ a } \quad \frac{5\pi}{4} &= \frac{5\pi \times 180}{4 \times \pi} \\ &= 225^\circ \end{aligned}$$

$$\begin{aligned} \text{b } \quad -\frac{2\pi}{3} &= \frac{2\pi \times 180}{3 \times \pi} \\ &= -120^\circ \end{aligned}$$

$$\begin{aligned} \text{c } \quad \frac{7\pi}{12} &= \frac{7\pi \times 180}{12 \times \pi} \\ &= 105^\circ \end{aligned}$$

$$\begin{aligned} \text{d } \quad -\frac{11\pi}{6} &= \frac{11\pi \times 180}{6 \times \pi} \\ &= -330^\circ \end{aligned}$$

$$\begin{aligned} \text{e } \quad \frac{13\pi}{9} &= \frac{13\pi \times 180}{9 \times \pi} \\ &= 260^\circ \end{aligned}$$

$$\begin{aligned} \text{f } \quad -\frac{11\pi}{12} &= \frac{11\pi \times 180}{12 \times \pi} \\ &= -165^\circ \end{aligned}$$

$$3 \text{ a } \quad \cos\left(\frac{3\pi}{2}\right) = 0$$

$$\text{b } \quad \sin\left(-\frac{\pi}{2}\right) = -1$$

$$\text{c } \quad \cos(6\pi) = 1$$

$$\text{d } \quad \sin\left(\frac{15\pi}{2}\right) = -1$$

$$4 \text{ a } \quad \sin(270^\circ) = -1$$

**b**  $\cos(-540^\circ) = -1$

**c**  $\sin(450^\circ) = 1$

**d**  $\cos(720^\circ) = 0$