

LS 10 5 164

$$5.) a) \sin(5^\circ) \approx \sin(0^\circ) = 0 \Rightarrow \underline{\underline{\sin(5^\circ) = 0,09}}$$

$$b) \cos(280^\circ) \approx \cos(270^\circ) = 0 \Rightarrow \underline{\underline{\cos(280^\circ) = 0,17}}$$

$$c) \sin(80^\circ) \approx \sin(90^\circ) = 1 \Rightarrow \underline{\underline{\sin(80^\circ) = 0,98}}$$

$$d) \cos(170^\circ) \approx \cos(180^\circ) = -1 \Rightarrow \underline{\underline{\cos(170^\circ) = -0,98}}$$

$$8.) a) \alpha = 810^\circ = 2 \cdot 360^\circ + 90^\circ \Rightarrow \alpha' = 90^\circ$$

$$\sin(90^\circ) = 1 = \sin(90^\circ + 360^\circ) = \sin(90^\circ - 360^\circ)$$

$$1 = \underline{\underline{\sin(450^\circ)}} = \underline{\underline{\sin(-270^\circ)}}$$

$$b) \alpha = -270^\circ = -1 \cdot 360^\circ + 90^\circ \Rightarrow \alpha' = 90^\circ$$

$$\sin(90^\circ) = 1 = \sin(\underbrace{90^\circ + 3 \cdot 360^\circ}_{= 1170^\circ}) = \sin(\underbrace{90^\circ + 4 \cdot 360^\circ}_{= 1530^\circ})$$

$$c) \alpha = 540^\circ = 1 \cdot 360^\circ + 180^\circ \Rightarrow \alpha' = 180^\circ$$

$$\sin(180^\circ) = 0 = \sin(\underbrace{180^\circ + 180^\circ}_{360^\circ}) = \sin(\underbrace{180^\circ + 360^\circ}_{540^\circ})$$

$$d) \alpha = -810^\circ = -2 \cdot 360^\circ - 90^\circ \Rightarrow \alpha' = -90^\circ$$

$$\sin(-90^\circ) = -1 = \underline{\underline{\sin(270^\circ)}} = \underline{\underline{\sin(\underbrace{-360^\circ - 90^\circ}_{= -450^\circ})}}$$