

Exemplar Problem

Trigonometry Functions

**70.**  $\sin 10^\circ$  is greater than  $\cos 10^\circ$ .

**Ans:** Given,  $\sin 10^\circ > \cos 10^\circ$

$$\Rightarrow \sin 10^\circ > \cos (90^\circ - 80^\circ)$$

We know that  $\cos (90^\circ - \theta) = \sin \theta$ . Therefore, we get

$$\Rightarrow \sin 10^\circ > \sin 80^\circ$$

It is incorrect because value of  $\sin e$  is in increasing order.

Thus, the given statement is false.