

Trigonometric Functions - Class XI

Related Questions with Solutions

Questions

Question: 01

Which of the following is greatest?

- A. $\tan 1$
- B. $\tan 4$
- C. $\tan 7$
- D. $\tan 10$

Solutions

Solution: 01

$$\because \tan \theta = \tan(\theta - n\pi), n \in I$$

$$\therefore \tan 4 = \tan(4 - \pi)$$

$$\therefore \tan 7 = \tan(7 - 2\pi)$$

$$\therefore \tan 10 = \tan(10 - 3\pi)$$

$$\text{now } 0 < 10 - 3\pi < 7 - 2\pi < 4 - \pi < 1$$

$$\tan 0 < \tan(10 - 3\pi) < \tan(7 - 2\pi) < \tan(4 - \pi) < \tan 1$$

$$0 < \tan 10 < \tan 7 < \tan 4 < \tan 1$$

Correct Options

Answer:01

Correct Options: A