

## **Answer on Question #51207 – Math – Discrete Mathematics**

A relation R defined on a set S is said to be ..... if  $bRa \forall a, b \in S$ .

- a. transitive
- b. reflexive
- c. symmetric
- d. none of the above

### **Solution**

A relation R defined on a set S is said to be

- i. reflexive if we have  $aRa \forall a \in S$ .
- ii. symmetric if  $aRb \Rightarrow bRa \forall a, b \in S$ .
- iii. transitive if  $aRb$  and  $bRc \Rightarrow aRc \forall a, b, c \in S$ .

**Answer:** d. none of the above.