

**Answer on Question #40368 – Math - Other**

BIOMEDICAL: Cholesterol. An experimental drug lowers a patients blood serum cholesterol at the rate of  $t$  square root of  $25-t^2$  units per day, where  $t$  is the number of days since the drug was administered. Find the total change during the first 3 days.

**Solution.**

When the drug was administered the level of serum cholesterol was  $\sqrt{25} = 5$ .

After first 3 days the level of serum cholesterol is:

$$l = \sqrt{25 - 3^2} = \sqrt{16} = 4 \text{ units.}$$

So, the total change during the first 3 days is  $5 - 4 = 1$  unit.