

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.