

Ajayi Eniola Christopher

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Computer Engineering

(1) Initial temp (IT) =  $10^{\circ}\text{C}$

Second temp (ST) =  $20^{\circ}\text{C}$

Time from IT to ST = 5 mins = 300

Actual temp (AT) =  $25^{\circ}\text{C}$

std Temp (CT) =  $24.9^{\circ}\text{C}$  2Time (2T) = ??

If from IT to ST =  $20^{\circ}\text{C} - 10^{\circ}\text{C} = 10^{\circ}\text{C}$

and it takes 5 min to cover  $10^{\circ}\text{C}$

$5^{\circ}\text{C} = \frac{1}{2}$  of 5 min

$= 5^{\circ}\text{C} = 2.5$  mins (to move from  $20^{\circ}\text{C}$  to  $25^{\circ}\text{C}$ )

$25^{\circ}\text{C} = 2.5$  m

$\therefore 24.9^{\circ}\text{C} = ?$

$$= \frac{2.5 \times 24.9}{2.5} \quad [2.5 \text{ min} = 150 \text{ secs}]$$

$$= \frac{150 \times 24.9}{25} = 6 \times 24.9 = 149.4$$

$$\therefore 149.4 \div 60$$

$$= 249 \Rightarrow 2 \text{ mins } 49 \text{ sec}$$