Name: Udafia Idara Emmanuel
Mat.No: 18/ENG04/072
Department: Electrical/Electronics
Course: ENG 282

T_1 of the thermometer = 10°c
T_2 of the thermometer = 20°c
Time taken = 5 minutes = 5×60 = 300 seconds

$\Delta T = 20 - 10 = 10°c$
Find T = 24.9°c $\Delta T_2 / T$
$\Delta T_2 = 24.9 - 10 = 14.9$

10°c to 300 secs
14.9°c to x

$\Rightarrow$ 10°c = 300sec
14.9°c = x
cross multiply

$10x = 300 \times 14.9$
$10x = 4470$
$x = 447$
$x = 447$ seconds
$x = 7$ minutes 27 seconds