

Question 7.

a.) i)

 $\ddot{U}$ 

b) i) 
$$V = 25(1 - \frac{0}{60})^2$$

= 25

.: 25 l.

ii) 
$$\frac{25}{4} = 25(1-\frac{t}{60})^2$$

25 -100(

$$\frac{25}{4} = 25\left(\frac{59t}{60}\right)^2$$

35-25

$$-59t^2 = 1500 - 375$$

$$-t^2 = 1|25 \div 59$$

. After about 4 = socoudo

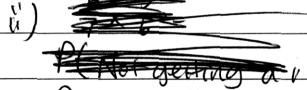


(11)

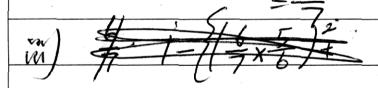
c) i) The total number of Soctos = 8.

\$\frac{1}{8} \times \text{After the first selection, there are 7 socks left in the drawer, and the P (getting a matching pair) = \frac{1}{7}

P(Not getting a matching pair) = 1-\frac{1}{7}



P(Not having a matering pair after 3rd Selecting) =  $\frac{5}{7} \times \frac{5}{7}$ 



 $\frac{1}{25} = \frac{1}{25} = \frac{1}{25} = \frac{1}{29} = \frac{1}{294} = \frac{1}{294$