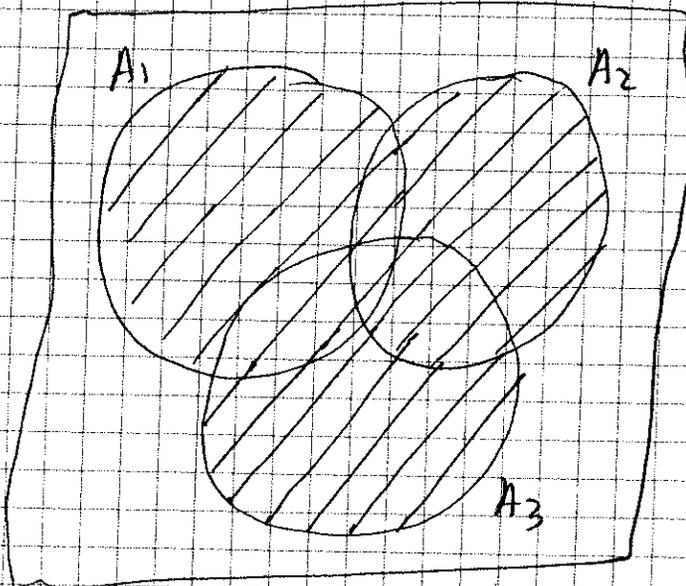
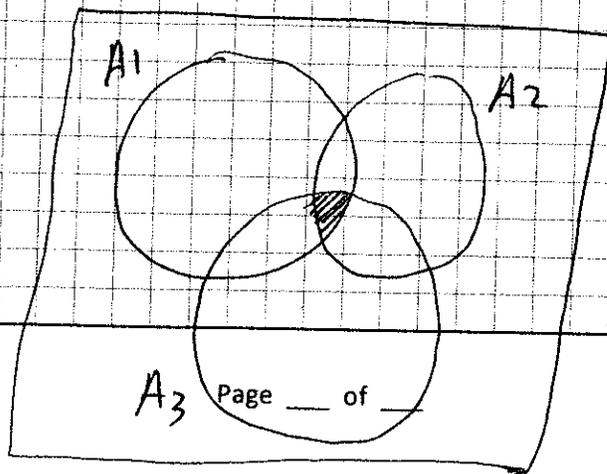


8.
P55

$$\begin{aligned}
 \text{a) } P(\text{at least 1 completed on time}) &= P(A_1 \text{ or } A_2 \text{ or } A_3) \text{ or } P(A_1 \cup A_2 \cup A_3) \\
 &= P(A_1) + P(A_2) + P(A_3)
 \end{aligned}$$



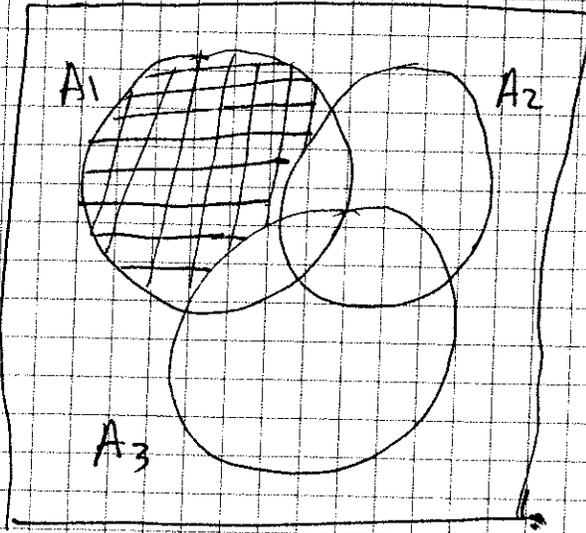
$$\begin{aligned}
 \text{b) } P(\text{all completed on time}) &= P(A_1 \text{ and } A_2 \text{ and } A_3) \text{ or } P(A_1 \cap A_2 \cap A_3) \\
 &= P(A_1) * P(A_2) * P(A_3)
 \end{aligned}$$



c) $P(\text{site 1 only})$

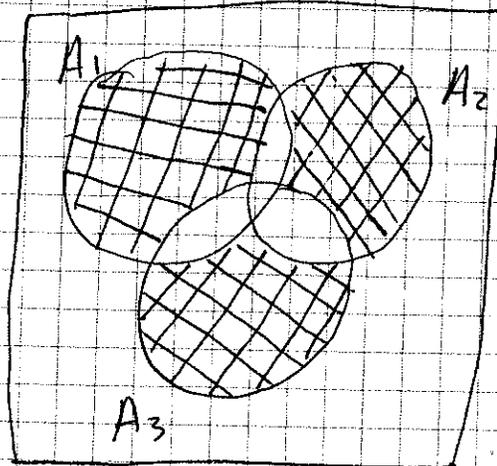
$$= P[A_1 \cap (\overline{A_2 \cup A_3})]$$

or $P(A_1 \cap \overline{A_2} \cap \overline{A_3})$

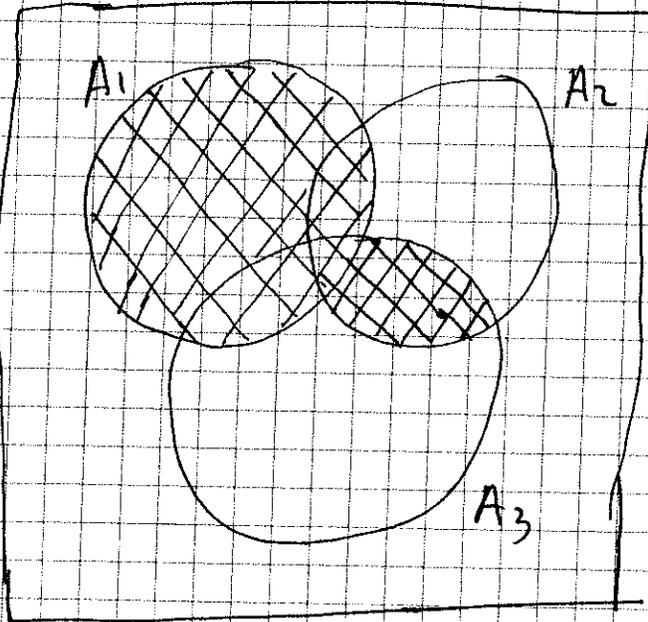


d) $P(\text{exactly 1 completed on time})$

$$= P[(A_1 \cap \overline{A_2} \cap \overline{A_3}) \cup (A_2 \cap \overline{A_1} \cap \overline{A_3}) \cup (A_3 \cap \overline{A_1} \cap \overline{A_2})]$$



e) $P(\text{site 1 or both of the other 2})$
 $= P[A_1 \cup (A_2 \cap A_3)]$



15.
P63

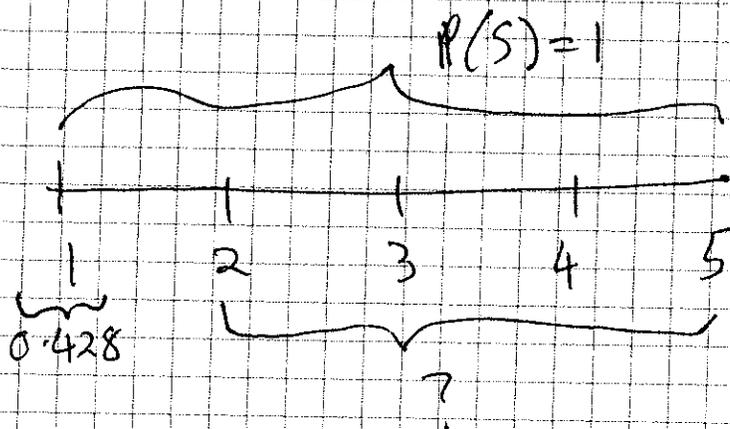
a) G = event of purchasing gas dryer

E = event of purchasing electric dryer.

$$P(\leq 1 \text{ gas}) = 0.428$$

$$P(\text{at least 2 elec}) = P(\leq 1 \text{ gas})^c$$

$$= 1 - 0.428 = 0.572$$



$$P(\text{all five get gas}) = P(\text{zero electric}) \\ = 0.116$$

$$P(\text{not zero electric}) = P(\text{at least one electric}) \\ = 1 - 0.116 = 0.884$$

$$P(\text{all five get electric}) = P(\text{zero gas}) \\ = 0.005$$

$$P(\text{not zero gas}) = P(\text{at least one gas}) \\ = 1 - 0.005 = 0.995$$

$$P(\text{at least one of each}) \\ = P(\text{at least one gas AND at least one electric}) \\ = P(\geq 1 \text{ gas}) \times P(\geq 1 \text{ electric}) \\ = 0.884 \times 0.995 = 0.87958$$