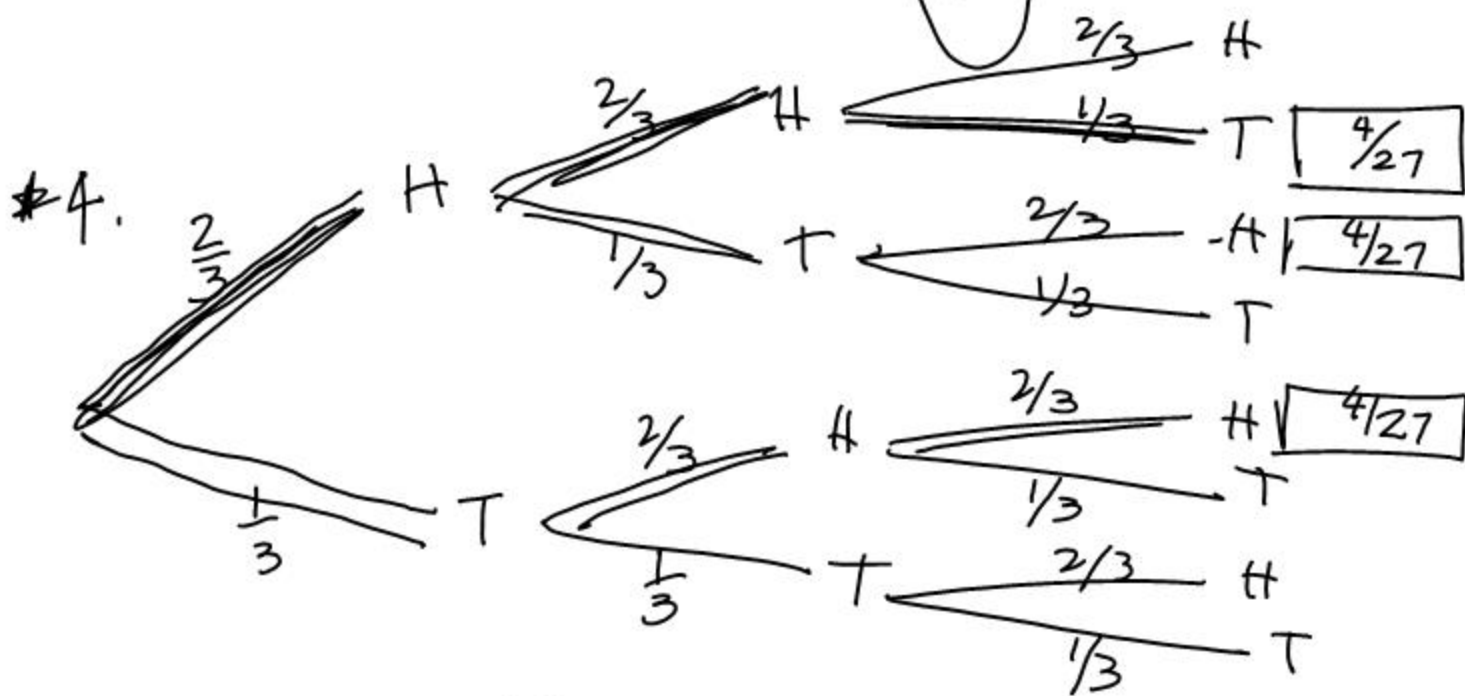
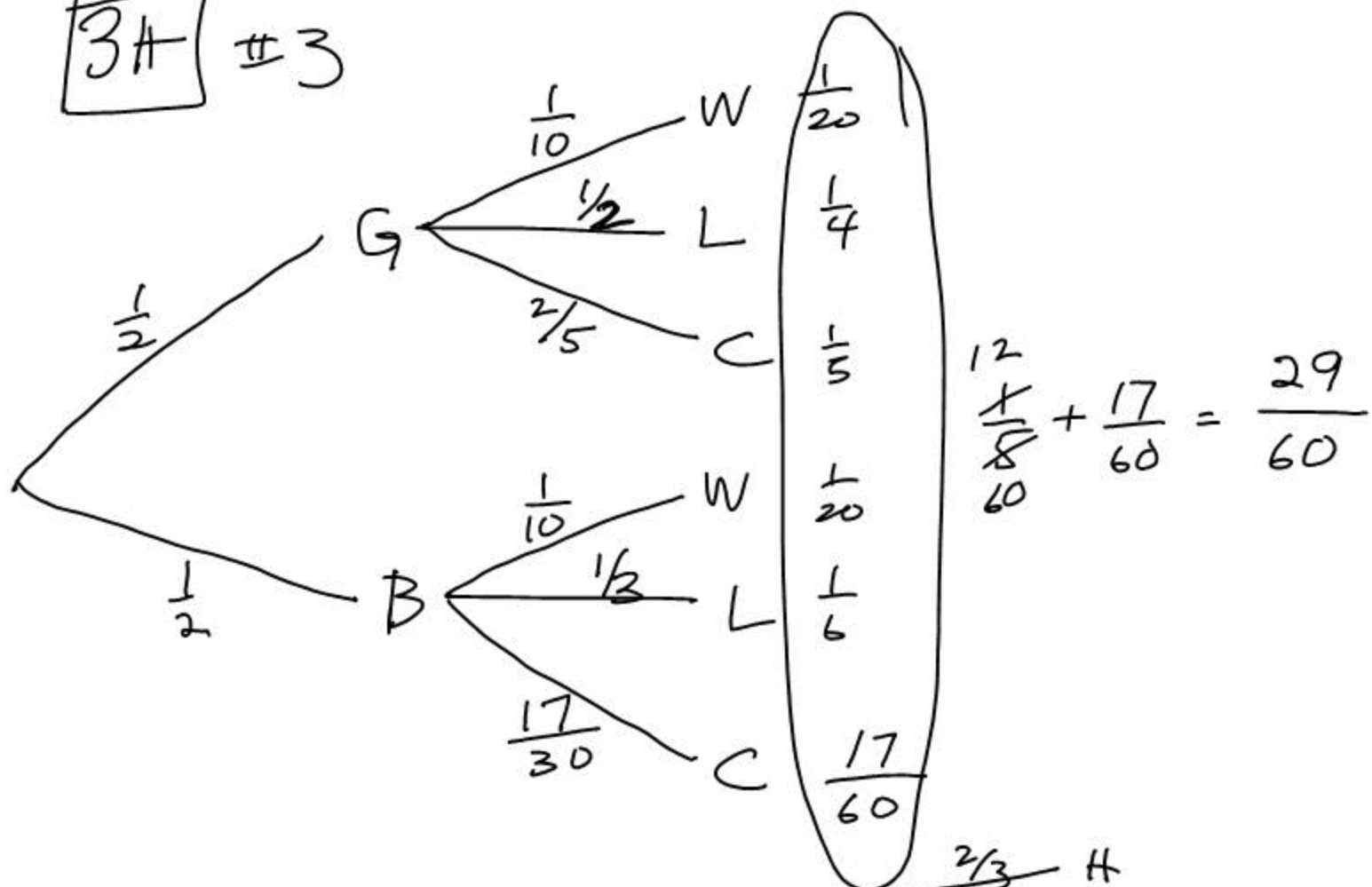
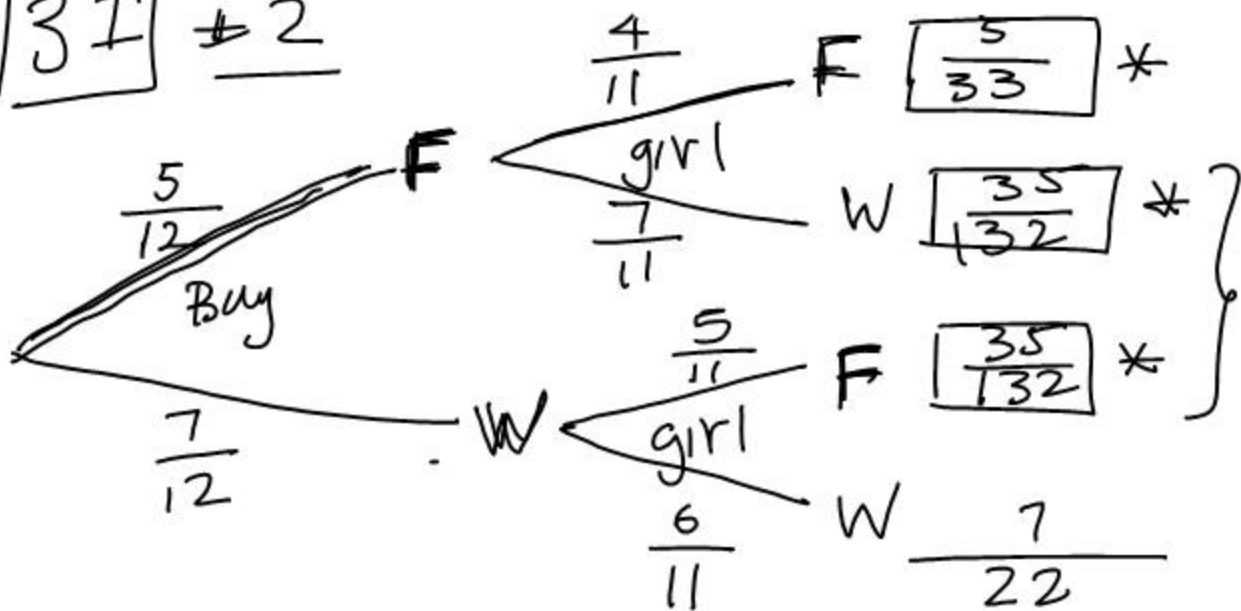


**3A** #3



$$P(2H) = \frac{12}{27}$$

$$\boxed{31} \neq 2$$



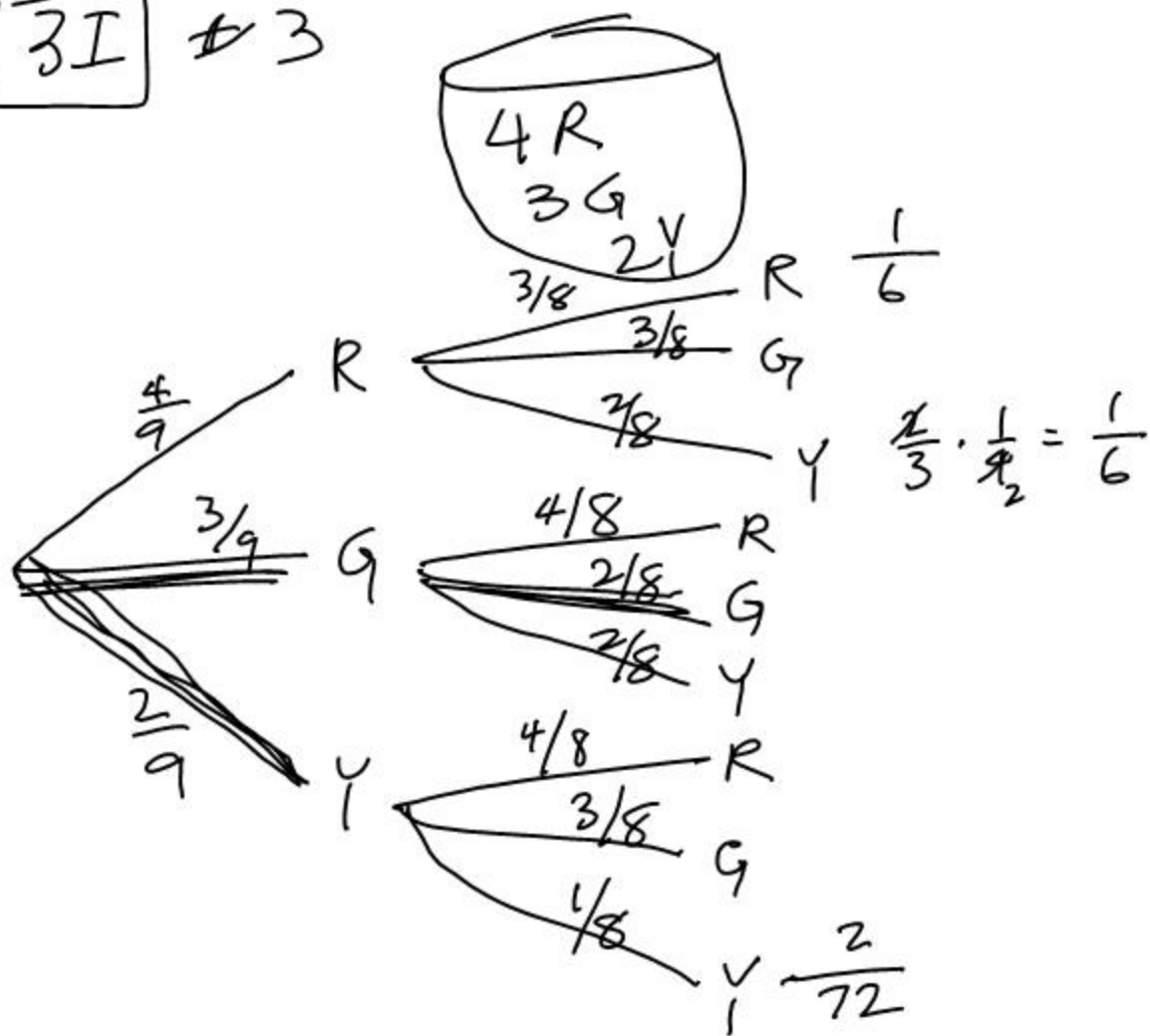
$$\begin{aligned}
 P(\text{at least 1 faulty}) &= 1 - P(\text{no faulty}) \\
 &= 1 - \frac{7}{22} = \frac{15}{22}
 \end{aligned}$$

$$P(\text{girl get faulty} \mid \text{exactly 1 faulty is chosen})$$

$$= \frac{P(\text{girl gets faulty} \cap \text{ex. 1 faulty})}{P(\text{exactly 1 faulty})}$$

$$= \frac{\frac{35}{132}}{\frac{35}{132} + \frac{35}{132}} = \frac{1}{2}$$

3I 3



$$P(G, G) = \frac{1}{3} \cdot \frac{1}{4} = \frac{1}{12}$$

$$P(\text{same}) = \frac{RR}{6} + \frac{GG}{12} + \frac{YY}{72} = \frac{5}{18}$$

$$P(\text{no reds}) = \frac{GG}{12} + \frac{GY}{12} + \frac{YG}{12} + \frac{YY}{72} = \frac{5}{18}$$

$$P(\text{at least 1 yellow}) = \frac{YY}{9} + \frac{GY}{12} + \frac{RY}{6} = \frac{17}{36}$$

Thursday 9-7  and  review

Monday 9-11 Answers questions on review

Wednesday 9-13 TEST on chapter 3

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Review #1 (a)  $\frac{18}{90} \leftarrow 10, 15, 20, \dots, 95$   
 $\leftarrow$  numbers from 10 to 99

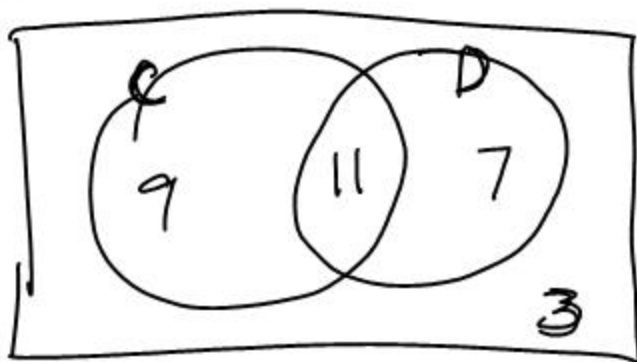
(b)  $3 \times \underline{4}, 3 \times \underline{5}, \dots, 3 \times \underline{33}$   $\frac{30}{90} = \frac{1}{3}$

(c)  $51, 52, \dots, 99$   $\frac{49}{90}$

(d)  $4^2, 5^2, \dots, 9^2$   $\frac{6}{90} = \frac{1}{15}$

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#2



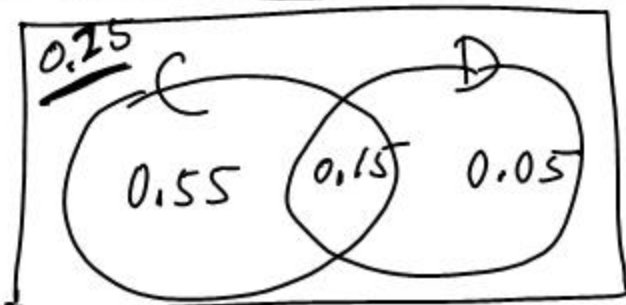
$$\begin{array}{r} 18 \\ + 20 \\ \hline 38 \end{array}$$

$$\begin{array}{r} 38 \\ - 27 \leftarrow \text{Dog or cat or both} \\ \hline 11 \end{array}$$

$$P(D \cap C) = \frac{11}{30}$$

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#3



$$\begin{array}{r} 0.2 \\ 0.7 \\ \hline 0.9 \end{array}$$

$$\begin{array}{r} 0.9 \\ - 0.75 \leftarrow C \cup D \\ \hline 0.15 \end{array}$$

$$\begin{aligned} P(C \cap D') &= 0.55 \\ P(C) \cdot P(D) &= (0.7)(0.2) \\ &= 0.14 \end{aligned}$$

$$P(C \cap D) = 0.15$$

so they're not independent

$$\# 4 \quad (a) \quad P(A|B) = \frac{P(A \cap B)}{P(B)}$$

$$0.1 = \frac{P(A \cap B)}{0.2} \Rightarrow P(A \cap B) = 0.02$$

$$(b) \quad P(A \cup B)$$

$$(c) \quad P(A \cap B') + P(B \cap A')$$

$$(d) \quad P(B|A)$$

!