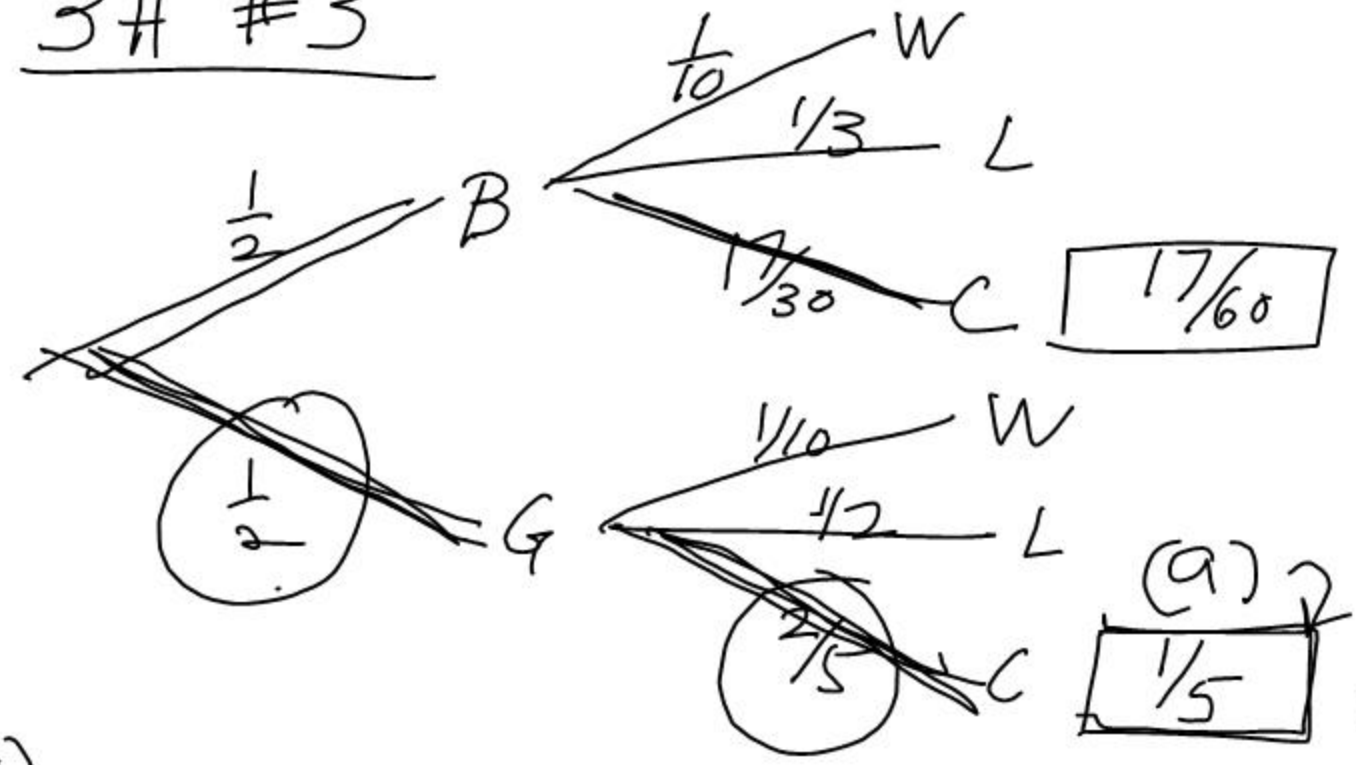
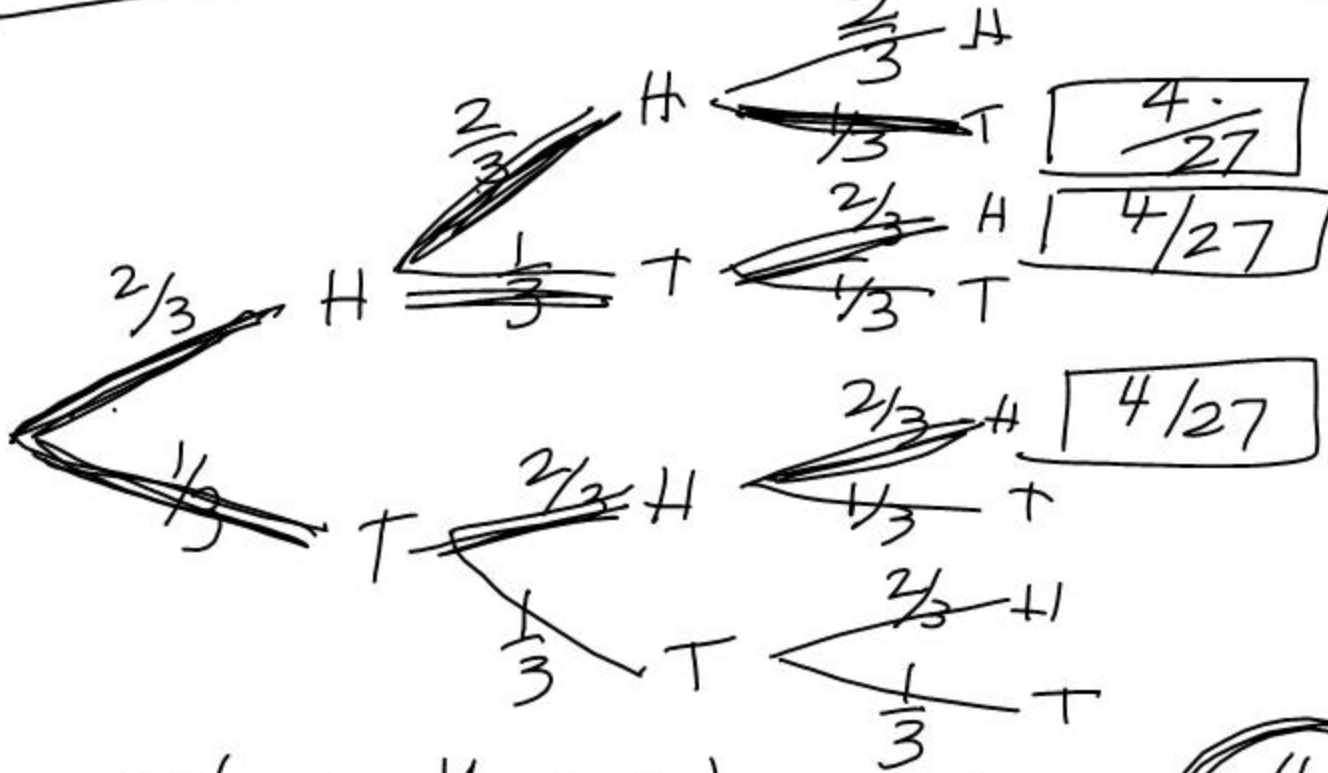
3H #3



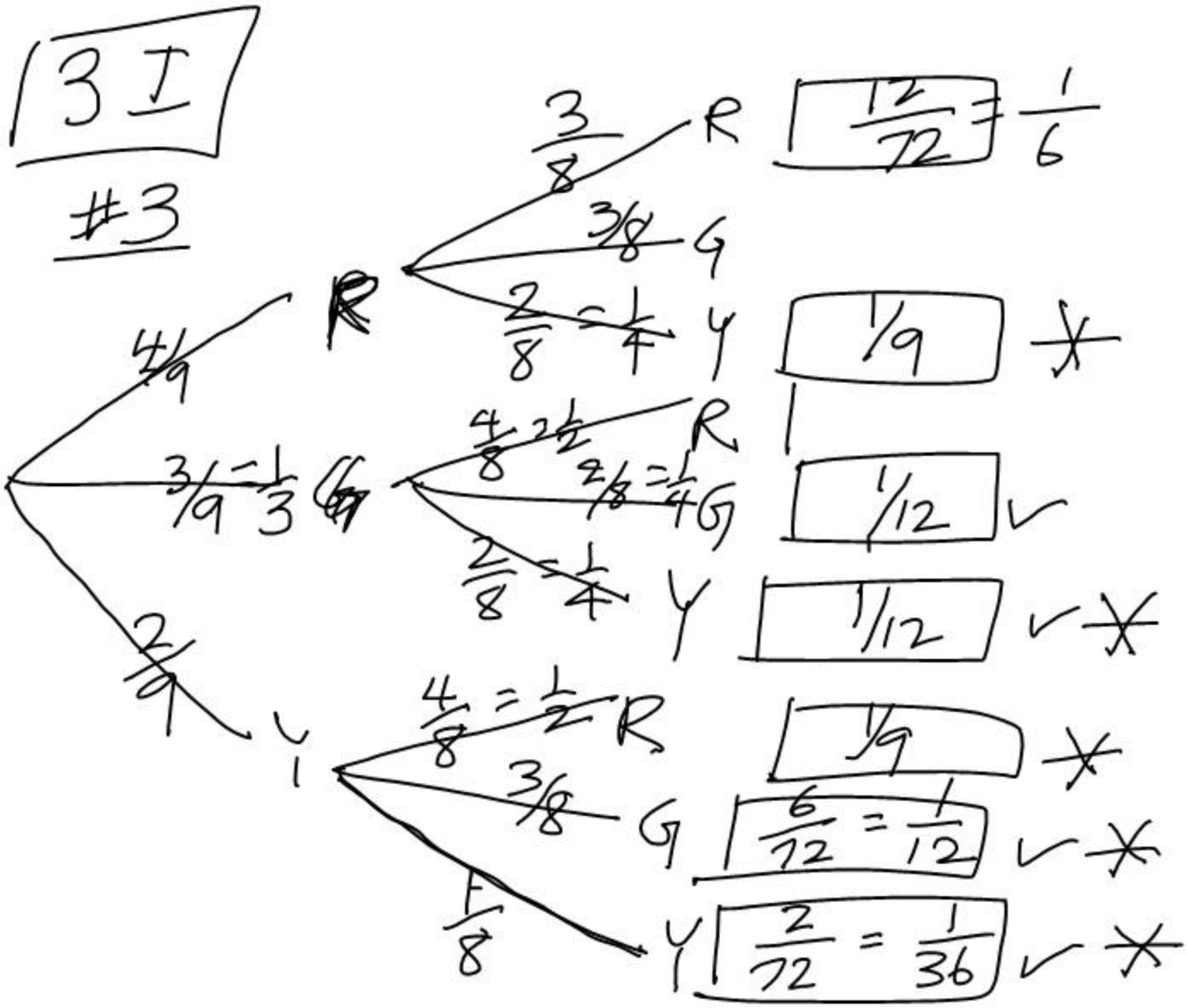
(b) $P(\text{coach}) = \frac{17}{60} + \frac{+12}{560} = \frac{29}{60}$



$P(\text{exactly 2 H}) = \frac{12}{27} = \frac{4}{9}$

3 I

#3



$$P(\text{same color}) = \frac{6}{36} + \frac{3}{36} + \frac{1}{36} = \frac{10}{36} = \frac{5}{18}$$

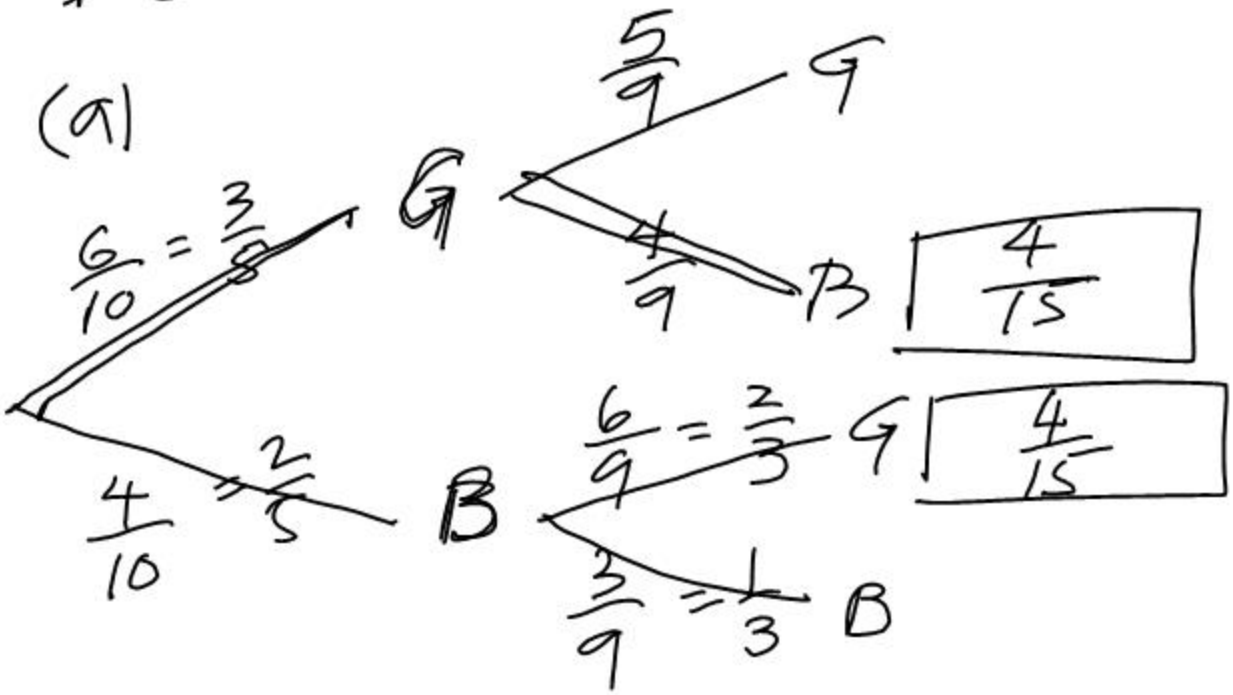
(c) $P(\text{no reds}) = \frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{36} = \frac{3}{18}$

(d) $P(1 \text{ yellow}) = \frac{1}{9} + \frac{1}{12} + \frac{1}{9} + \frac{1}{12} + \frac{1}{36} =$

3 I

#5

(a)



$$P(1B+1G) = \frac{4}{15} + \frac{4}{15} = \frac{8}{15}$$

HW quiz 8/30

A bent coin comes up heads $\frac{3}{5}$ of the time. The coin is tossed twice. Draw a tree + find the probability of getting 1 Head and 1 Tail in any order.

Ex 

$$\frac{7 \cdot 6 \cdot 5 \cdot 4 \cdot 3}{2 \cdot 2 \cdot 2} \cdot \frac{2 \cdot 1}{}$$

Factorial: $7! = 7 \cdot 6 \cdot 5 \cdot 4 \cdot 3 \cdot 2 \cdot 1$

$$\frac{7!}{2! \cdot 2! \cdot 2!}$$

MATH PROB !

Ex How many ways can rearrange the letters in LOLLY to get unique words?

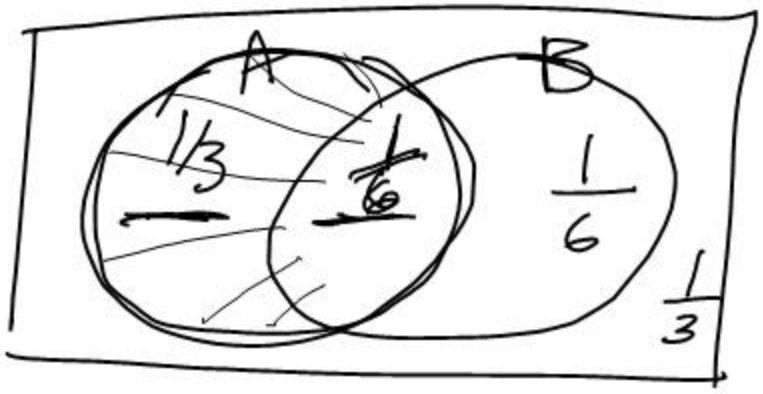
$$\frac{5!}{3!}$$

$$= \frac{5 \cdot 4 \cdot \cancel{3 \cdot 2}}{\cancel{3 \cdot 2}} = 20$$

EX. We have 2 events: A and B

$P(A) = \frac{1}{2}$, $P(B) = \frac{1}{3}$,

$P(A' \cap B') = \frac{1}{3}$ • Find $P(A \cap B) = \frac{1}{6}$

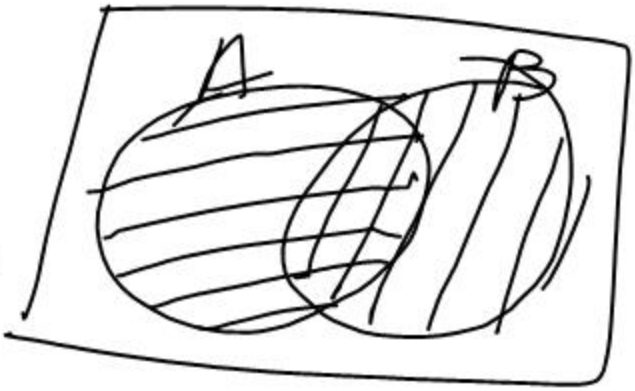


$\frac{1}{3} + \frac{1}{3} + \frac{1}{2} = \frac{7}{6}$

• Find $P(A \cap B') = 1/3$

- Find $P(A \cup B)$

$= \frac{1}{3} + \frac{1}{6} + \frac{1}{6} = \frac{2}{3}$



Formula Approach

- $P(A \cup B) = P(A) + P(B) - P(A \cap B)$

$= \frac{1}{2} + \frac{1}{3} - \frac{1}{6}$

$= \frac{2}{3}$

$P(A \cap B) = P(A) + P(B) - P(A \cup B)$

HW 3C #1-8