

$$29. b. \quad \frac{4800}{5000} = .96$$

$$(.96)^{100} = .0169$$

$$27. c \quad .1 \quad .1 \quad .01 \quad .99 \quad \text{Not}$$

# Probability

$$\frac{1}{3} \quad 1:3$$

$$1+3$$

$$.33\frac{1}{3}$$

$$33\frac{1}{3}\%$$

$$0 \leq P(A) \leq 1$$

Odds favor

$$\frac{\text{favorable}}{\text{unfavorable}} \quad \frac{\text{will}}{\text{won't}}$$

$$P(A) = \frac{2}{5}$$

$$\text{Odds} = \frac{2}{3} \quad \frac{2}{5-2}$$

$$\text{Odds} = \frac{1}{4}$$

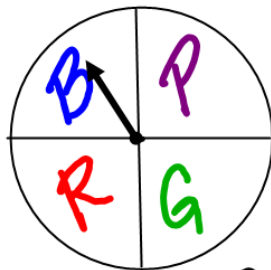
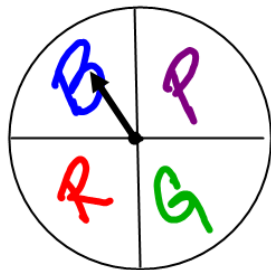
$$P(A) = \frac{1}{5}$$

$$P(A) = \frac{1}{5} = .2$$

$$P(\bar{A}) = \frac{4}{5} = .8$$

Unusual  $P(A) \leq .05$

# Sample Space



BB  
BP  
BG  
BR

PB  
PP  
PG  
PR

GB  
GP  
GG  
GR

RB  
RP  
RG  
RR

Dice  
1 H  
2 H  
3 H  
4 H  
5 H  
6 H

Coin  
1 T  
2 T  
3 T  
4 T  
5 T  
6 T

Dice

$P(\text{Even})$  or  $P(\text{multiple of } 3)$

$\textcircled{2}$   $\textcircled{4}$   $\textcircled{6}$

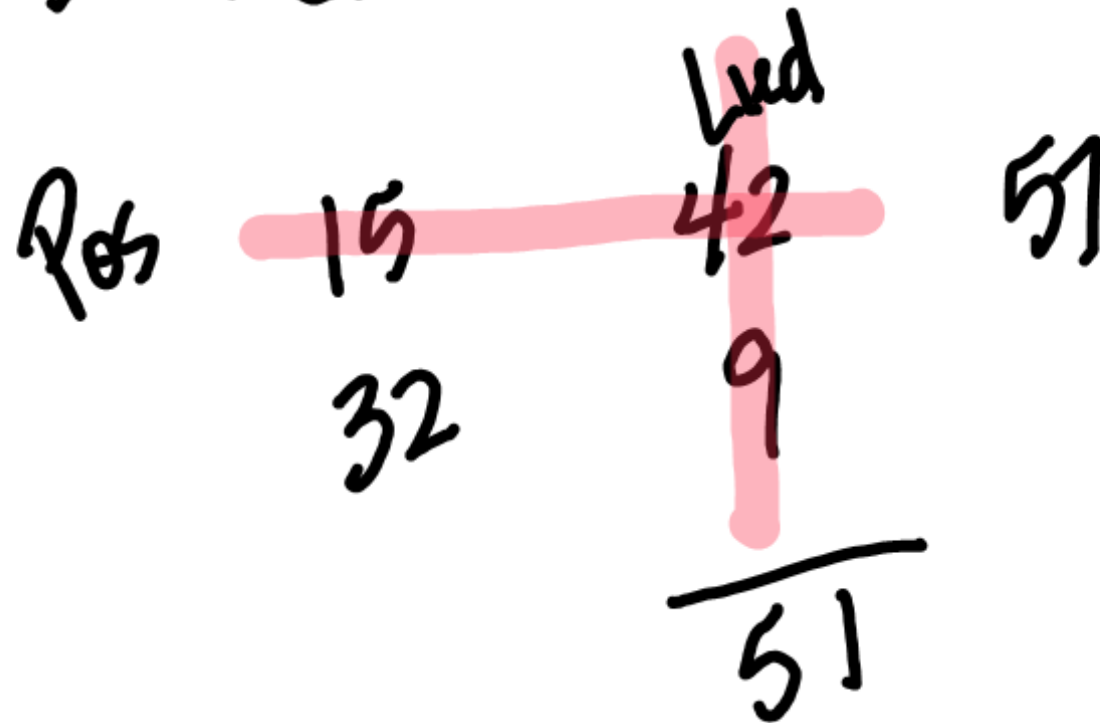
$\textcircled{3}$   $\textcircled{6}$

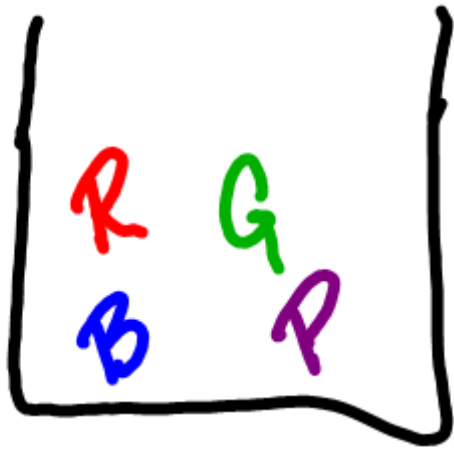
$$\frac{4}{6}$$

$$\frac{2}{3}$$

$P(A \text{ or } B)$

→  $P(A) + P(B) - P(A \text{ and } B)$





$$P(B) = \frac{1}{4}$$

With  $P(G) = \frac{1}{4}$

$$P(B) = \frac{1}{4}$$

Without  
 $P(G) = \frac{1}{3}$