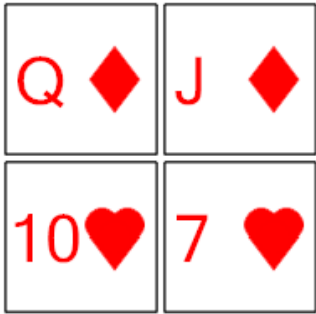


## Probability Union, Intersection, Complement - Cards Example Problem to Set Operation

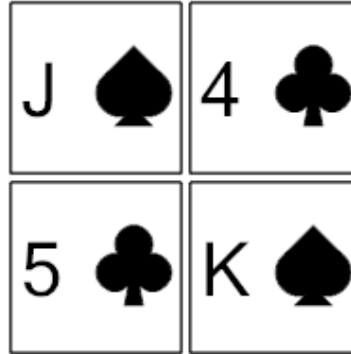
1 What set operation would give you the probability of drawing a card that is both red and over 6?



A  $P(\text{red} \cup \text{over } 6)$  B  $P(\text{red} \cap \text{over } 6)$

C  $P(\text{red}')$

2



What set operation would give you the probability of drawing a card that is a 7 or black?

A

B

$P(7 \cup \text{black})$   $P(7')$

3 What set operation would give you the probability of drawing a card that is both a spade and under 8?

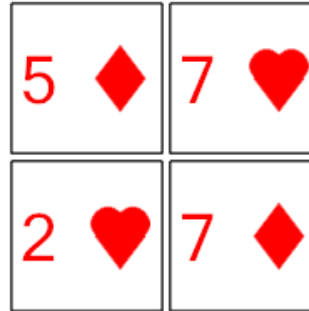


A  $P(\text{spades}')$

B  $P(\text{spades} \cap \text{under } 8)$

C  $P(\text{spades} \cup \text{under } 8)$

4 What set operation would give you the probability of drawing a card that is both under 8 and red?



A  $P(\text{under } 8 | \text{red})$

B  $P(\text{under } 8 \cap \text{red})$

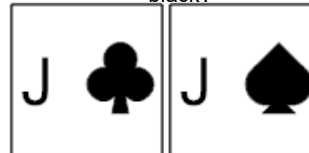
C  $P(\text{under } 8 \cup \text{red})$

5 What set operation would give you the probability of drawing a card that is both a 5 and red?



A  $P(5 \cap \text{red})$  B  $P(5 | \text{red})$

6 What set operation would give you the probability of drawing a card that is both a Jack and black?



A  $P(J | \text{black})$  B  $P(J \cap \text{black})$

C  $P(J')$

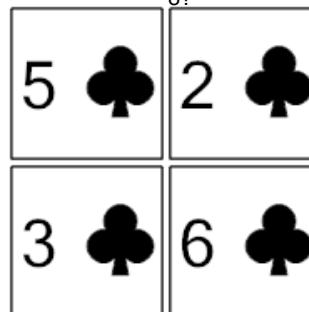
7 What set operation would give you the probability of drawing a card that is both a 2 and red?



A  $P(2 \cup \text{red})$  B  $P(2')$

C  $P(2 \cap \text{red})$

8 What set operation would give you the probability of drawing a card that is both a club and under 8?



A  $P(\text{clubs} | \text{under } 8)$

B  $P(\text{clubs} \cap \text{under } 8)$

C  $P(\text{clubs} \cup \text{under } 8)$