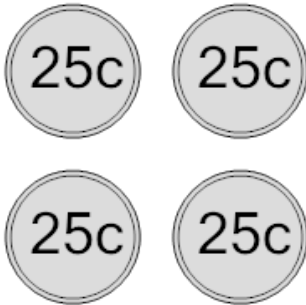


Probability Union, Intersection, Complement - Coins Example Problem to

Name _____

1 What set operation would give you the probability of getting exactly 2 tails when flipping 4 coins, given that the first flip was tails?



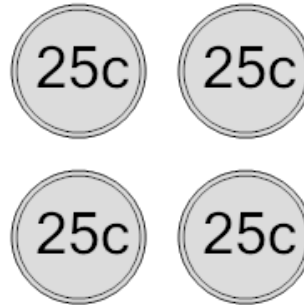
A (first is tails) conditional on (2 tails)

B (2 tails) union (first is tails)

C Complement of (2 tails)

D (2 tails) conditional on (first is tails)

2 What set operation would give you the probability of getting exactly 3 heads when flipping 4 coins, given that the first flip was heads?



A (3 heads) intersect (first is heads)

B (3 heads) conditional on (first is heads)

C (3 heads) union (first is heads)

D Complement of (3 heads)

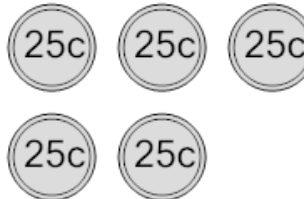
3 What set operation would give you the probability of flipping heads twice in a row?



A H_1 intersect H_2

B H_1 union H_2

4 What set operation would give you the probability of flipping at least one heads in 5 tries?



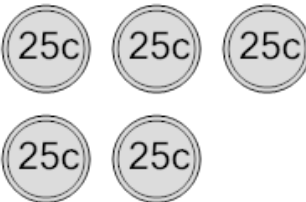
A (All Tails) intersect (All Tails)

B Complement of (All Tails)

C (All Tails) union (All Tails)

D (All Tails) conditional on (All Tails)

5 What set operation would give you the probability of getting exactly 4 tails when flipping 5 coins, given that the first flip was tails?



A Complement of (4 tails)

B (4 tails) union (first is tails)

C (4 tails) conditional on (first is tails)

D (4 tails) intersect (first is tails)

6 What set operation would give you the probability of flipping at least one tails in 2 tries?



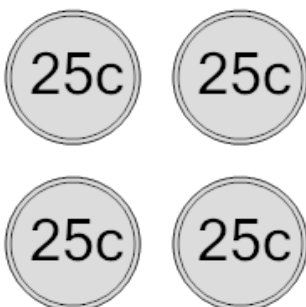
A (All Heads) conditional on (All Heads)

B (All Heads) union (All Heads)

C (All Heads) intersect (All Heads)

D Complement of (All Heads)

7 What set operation would give you the probability of flipping at least one heads in 4 tries?



A (All Tails) conditional on (All Tails)

B Complement of (All Tails)

C (All Tails) intersect (All Tails)

D (All Tails) union (All Tails)

8 What set operation would give you the probability of flipping tails twice in a row?



A T_1 intersect T_2

B T_1 union T_2

C T_1 conditional on T_2