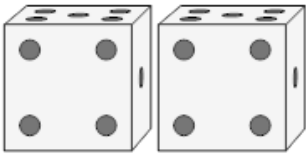


## Probability Union, Intersection, Complement - Dice Example Problem to

Name \_\_\_\_\_

1 What set operation would give you the probability of rolling a 4 at least once given two tries?

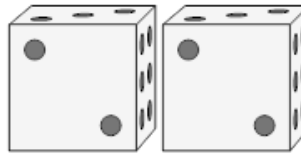


A  $4_1$  intersect  $4_2$

B Complement of  $4_1$

C  $4_1$  union  $4_2$

2 What set operation would give you the probability of both dice being a 2, given that at least one die is a 2?



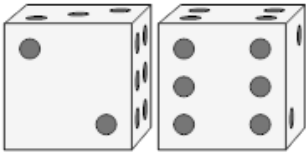
A Complement of (two 2s)

B (two 2s) conditional on (at least one 2)

C (two 2s) union (at least one 2)

D (at least one 2) conditional on (two 2s)

3 What set operation would give you the probability of one die showing a 2, given that the sum is 8?



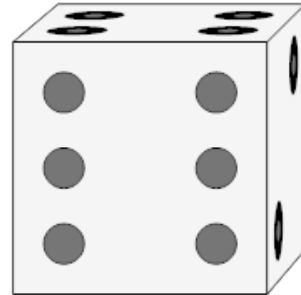
A (a 2) union (sum 8)

B (a 2) conditional on (sum 8)

C (a 2) intersect (sum 8)

D (sum 8) conditional on (a 2)

4 What set operation would give you the probability of not rolling a 6?



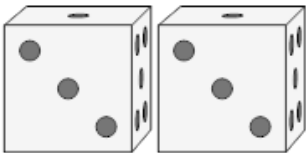
A (6) intersect (6)

B Complement of (6)

C (6) conditional on (6)

D (6) union (6)

5 What set operation would give you the probability of rolling a 3 at least once given two tries?

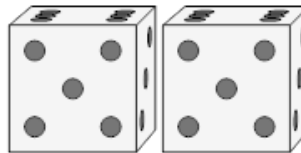


A  $3_1$  union  $3_2$

B  $3_1$  intersect  $3_2$

C Complement of  $3_1$

6 What set operation would give you the probability of rolling a 5 at least once given two tries?

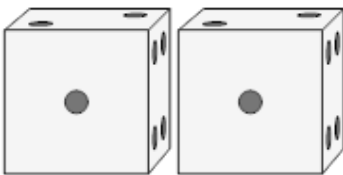


A  $5_1$  union  $5_2$

B  $5_1$  conditional on  $5_2$

C  $5_1$  intersect  $5_2$

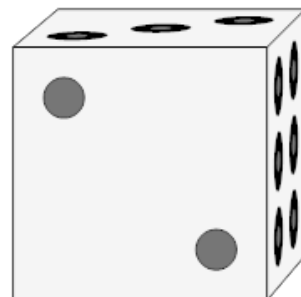
7 What set operation would give you the probability of rolling a 1 twice in a row?



A Complement of  $1_1$

B  $1_1$  intersect  $1_2$

8 What set operation would give you the probability of not rolling a 2?



A (2) intersect (2)

B (2) union (2)

C (2) conditional on (2)

D Complement of (2)