



Probability Union, Intersection, Complement - Letter Tiles Example

Problem to Name

1

L	

What set operation would give you the probability of the selected letter being 'L', if you know that the selected letter is before 'M' in the alphabet?

A	B
('L') intersect (before 'M')	('L') conditional on (before 'M')

2

W	

What set operation would give you the probability of drawing an 'W' at least once given two tries?

A	Complement of W_1
B	W_1 union W_2

3

What set operation would give you the probability of not drawing an 'B'?

B	

A	(B) intersect (B)
B	(B) conditional on (B)
C	Complement of (B)
D	(B) union (B)

4

G	

What set operation would give you the probability of the selected letter being 'G', if you know that the selected letter is before 'U' in the alphabet?

A	('G') intersect (before 'U')	B	(before 'U') conditional on ('G')
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5

O	

What set operation would give you the probability of the selected letter being 'O', if you know that the selected letter is before 'P' in the alphabet?

A	B
Complement of ('O')	(before 'P') conditional on ('O')

6

What set operation would give you the probability of drawing an 'M' twice in a row?

M	

A	M_1 conditional on M_2
B	M_1 union M_2
C	M_1 intersect M_2

7

What set operation would give you the probability of drawing an 'Y' at least once given two tries?

Y	

A	Y_1 intersect Y_2
B	Complement of Y_1
C	Y_1 union Y_2

8

D	

What set operation would give you the probability of the selected letter being 'D', if you know that the selected letter is before 'F' in the alphabet?

A	('D') intersect (before 'F')	B	('D') conditional on (before 'F')
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