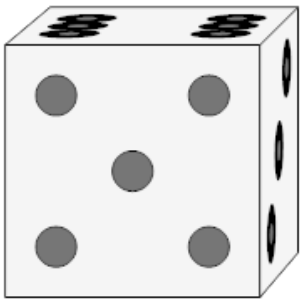
Name

Probability Union, Intersection, Complement - Example Problem to Formula

1 What formula would give you the chance of not rolling a 5?



A $\frac{P(5 \cap 5)}{P(5)}$

B $P(5) \cdot P(5)$

C $1 - P(5)$

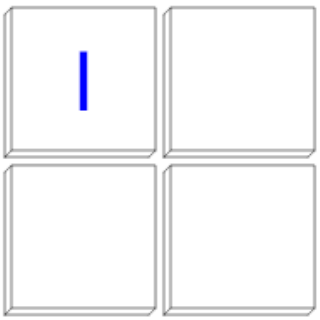
2 What formula would give you the chance of not drawing a card that is over 8?

A $1 - P(\text{over 8})$

B $\frac{P(\text{over 8} \cap \text{over 8})}{P(\text{over 8})}$

C $P(\text{over 8}) + P(\text{over 8}) - P(\text{over 8} \cap \text{over 8})$

3 What formula would give you the chance of not drawing an 'I'?

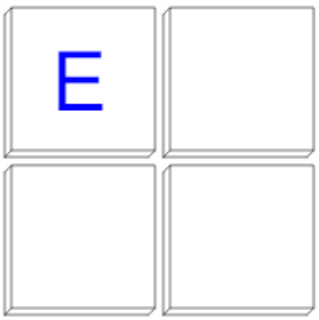


A $P(I) + P(I) - P(I \cap I)$

B $1 - P(I)$

C $\frac{P(I \cap I)}{P(I)}$

4 What formula would give you the chance of drawing an 'E' twice in a row?

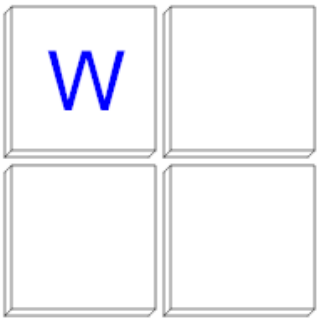


A $\frac{P(E_1 \cap E_2)}{P(E_2)}$

B $P(E_1) + P(E_2) - P(E_1 \cap E_2)$

C $P(E_1) \cdot P(E_2)$

5 What formula would give you the chance of drawing an 'W' twice in a row?

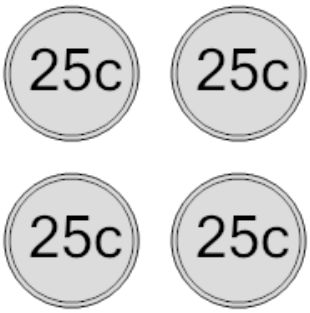


A $P(W_1) \cdot P(W_2)$

B $1 - P(W_1)$

C $\frac{P(W_1 \cap W_2)}{P(W_2)}$

6 What formula would give you the chance of flipping at least one heads in 4 tries?

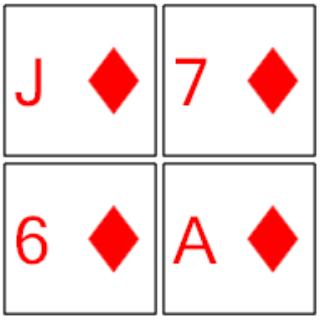


A $\frac{P(\text{All Tails} \cap \text{All Tails})}{P(\text{All Tails})}$

B $P(\text{All Tails}) \cdot P(\text{All Tails})$

C $1 - P(\text{All Tails})$

7 What formula would give you the chance of drawing a card that is both a diamond and over 4?

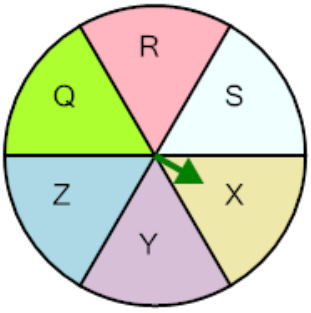


A $1 - P(\text{diamonds})$

B $P(\text{diamonds}) + P(\text{over 4}) - P(\text{diamonds} \cap \text{over 4})$

C $P(\text{diamonds}) \cdot P(\text{over 4})$

8 What formula would give you the chance of spinning 'X' at least once given two tries?



A $P(X_1) + P(X_2) - P(X_1 \cap X_2)$

B $1 - P(X_1)$

C $P(X_1) \cdot P(X_2)$