



Probability

About These Problems

Probability is a very vast and complicated field of mathematics. Thankfully most of the probability in standardized testing is event probability. Given a sample space of possible events, each being equally likely to happen, you will be asked to find the probability of a certain event.

Basic Formulas.

Assuming independence, which means both events are unrelated.

$P(A)$ = Probability event A occurs

$P(B)$ = Probability event B occurs

$P(A \text{ and } B \text{ occur}) = P(A) * P(B)$

$P(A \text{ or } B \text{ occur}) = P(A) + P(B)$

Question. If we are given two unloaded dice and are asked to roll an 8, what is the probability that will happen.

- A. $5/36$
- B. $1/3$
- C. $7/36$
- D. $1/6$
- E. $1/4$

Answer. A: Since there are 36 equal outcomes of a dice we have to count how many we can roll that yield a score of 8. $(2,6) | (6,2) | (3,5) | (5,3) | (4,4)$ which yield 5 outcomes over 36 total.