

1. Suppose a three-stage rocket is launched. The probability for failure during stage one is  $\frac{1}{10}$ . At stage two, the probability of failure is  $\frac{1}{5}$  and at stage three its  $\frac{1}{3}$ . What is the probability of a successful flight?
2. On a certain street there are three traffic lights. At any given time, the probability that a light is green is 0.3. What is the probability that a person will not see all three lights when they are green?
3. A fair coin is tossed and a six-sided die was thrown, what is the probability that it results in a head and an even number?
4. On a three question True-False test, what is the probability of getting all the answers correct if the student guessed the answers?
5. If A, B, C, D and E are vying to go on a school trip and their names are put in a hat, what is the probability of B and D being picked from the hat?