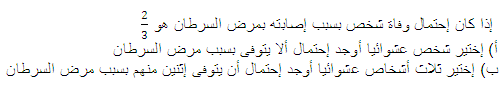
The probability of dying of cancer is.

A) What is the probability that if one person chosen at random he will not die of cancer

B) What is the probability that if three are chosen at random, two of them will die of cancer?



…………………………………………………………………..

* The probability of dying of cancer is.

1. What is the probability that if three are chosen at random, two of them will die of cancer?
2. What is the probability that none of them will die of cancer?

……………………………………..

On his way to work , Ahmad drives through three sets of traffic lights , the probability of each set of lights being red is 0.3 , the probability that they are all red is :

a) 0.9

b) 0.027

c) 0.7

d) 0.1

………………………………………………………………..

A virus reaches maturity in 2 years. Probability of Survival for the Virus

|  |  |  |
| --- | --- | --- |
| Climate | Survive for 1 Year | Survive for 2 Years |
| Desert | 90% | 82% |
| Tropical | 75% | 73% |
| Sub-Tropical | 72% | 52% |
| Arctic | 70% | 60% |

Which climate poses the greatest risks to the virus reaching maturity?

1. Desert
2. Tropical
3. Sub-Tropical
4. Arctic

Jamal and Naim are entering the Qatar Grand Prix motorcycle race. Suppose that the probability a given entrant ***fails*** to finish the race is 0.2. What is the probability that ***both*** Jamal and Naim will finish the race?

A. 0.04

B. 0.6

C. 0.64

D. 0.8

…………………………………………….

Wasim estimates that the probability he will get the flu during any given year is 0.25.

A. According to this estimate, what is the probability that Wasim will get the flu next year ***and*** the following year? Show your work.

B. What is the probability that Wasim will ***not*** get the flu even once in the next 3 years? Show your work.

………………………………………………………

When Samir goes swimming in the Gulf, the probability of getting a jellyfish sting is 0.15. If Samir goes swimming on Monday and Tuesday, which expression gives the probability that he will get a jellyfish sting on Monday but ***not*** on Tuesday?

A. 0.15 × 0.85

B. 0.85 × 0.85

C. 1 – 0.15 × 0.85

D. 1 – 0.85 × 0.85

|  |
| --- |
| Suppose that the probability that a computer is infected with a computer virus is 0.2.  **A.** If one computer is chosen at random, what is the probability that it is ***not*** infected by the virus?  **Answer:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **B.** If three computers are chosen at random, what is the probability that ***none*** of them will be infected by the virus? Show your work.  **Answer:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **Exemplary Response:**  **A.** 0.8  **B.** 0.8 × 0.8 × 0.8 = 0.512 |
| **Scoring Guide:**  1 point for correct answer to part A  1 point for correct strategy in part B  1 point for correct answer to part B  **Total: 3 points**  Note: Student can receive 1 point in part B for correct strategy based on incorrect answer to part A. |

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