Daily Question – Applied Mathematics - Day 9

Topic: Probability Distributions

Mariah has a biased four-sided dice that can land on one of the numbers 1, 2, 3 or 4.

The random variable X represents the number the dice lands on after a single roll.

$P(X = r) = P(X = 5 - r)$ for $r = 1, 2$

a Given that $P(X = 1) = 0.28$, find, in table form, the complete distribution of X. **(2 marks)**

The dice is rolled twice and the totals are added together.

b Find the probability that the total is 7 or more. **(3 marks)**