Answer on Question #42635– Math – Math, Statistics and Probability

Question:

Educational Qualification		Score		
	Below 50	Between 50 and 60	Above 60	Total
Diploma	90	20	10	120
Degree	30	70	30	130
I.T	60	70	20	150
Total	180	160	60	400

If an examinee is selected at random from this group, find:

1.1.1 The probability that he is a Diploma graduate. (3)

1.1.2 The probability that he is a Degree graduate, given that his scores are above 60. (3)

1.1.3 The probability that his score is below 50, given that he's doing IT. (3)

Solution:

1.1.1 The probability that he is a Diploma graduate is $P = \frac{120}{400} = 0.3$.

1.1.2 The probability that he is a Degree graduate, given that his scores are above 60 is $P = \frac{30}{400} = \frac{3}{40} = 0.075$.

1.1.3 The probability that his score is below 50, given that he's doing IT is $P = \frac{60}{400} = \frac{3}{200} = 0.15$.

Answer.   1.1.1 $P = 0.3$;

1.1.2 $P = 0.075$;

1.1.3 $P = 0.15$.