7 The eight digits 1, 2, 2, 3, 4, 4, 4, 5 are arranged in a line.

(a) How many different arrangements are there of these 8 digits? [1]

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(b) Find the number of different arrangements of the 8 digits in which there is a 2 at the beginning, a 2 at the end and the three 4s are not all together. [4]

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Three digits are selected at random from the eight digits 1, 2, 2, 3, 4, 4, 4, 5.

(c) Find the probability that the three digits are all different. [5]