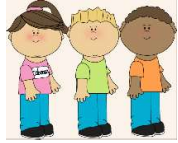


lesson 1a – working systematically or making an organised list

Solve the problems below by working in a logical order (eg. smallest to largest or “one option at a time”). Use the left-hand side for rough working out and the right-hand side for a refined solution that includes all relevant steps and can be followed by someone who has not attempted the problem.



Q1. Allison, Benjamin, Cullum, Deborah and Eileen have been nominated for the position of the school captain and vice-captain. How many different ways can these positions be allocated?

Draft Solution

Refined Solution



Q2. How many different whole numbers can you make using the digits 2, 4 and 7? Note each digit can be used at most once.

Draft Solution

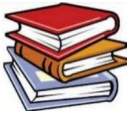
Refined Solution



Q3. How many whole numbers from 1 to 1000 have digits which add to 8?

Draft Solution

Refined Solution



Q4. In numbering the pages of a book there are exactly 201 digits used (where 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9 are the only digits). How many pages does the book have?

Draft Solution

Refined Solution