1 At a banquet, diners got to select from a menu for a three-course meal. There are 3 different appetizers, 2 different entrées and 4 different desserts to choose from. If Raul must select one appetizer, one entrée and one desert, how many different meals could he form?

2 How many 5 letter passwords can be made, if all letters must be lowercase and no letters can repeat?

3 How many 5 digit odd numbers can be made if digits cannot repeat?

4 Jacques is playing a strategy game. He is trying to get from point A to Point B. If he can only move to the left or down, how many different paths can he take from point A to point B?
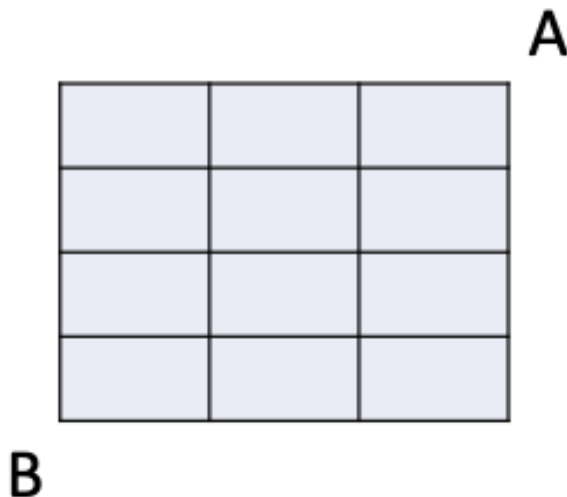
5   A hockey coach has to set a starting line-up. He needs one goalie, three forwards and two defensive players. The team has 14 forwards, 9 defensive players and two goalies. How many possible starting line-ups could the coach make?

6   A new licence plate start contains four letters followed by four digits. Letters and digits may be repeated. Pi just got a new catmobile and wants the first two letters of her license plate to be PI and the first three digits of the numbers to be 314. With this criteria, how many licence plates are possible?

7. Nigel is filling out his timetable for the next semester at school. He has to take French and Math. He must select five courses overall. To fill in the rest of his timetable he has the following options: Psychology, Biology, Physics, Art, Physical Education, Computer Science and Wood Work. How many ways could he fill his timetable?

8. Simplify: $\dfrac{(n-1))!}{(n+2)!}$

9. How many ways can the letters of the word **AVOCADO** be arranged?

10. If $_7P_r$ = 210, what is the value of 'r'?