

- 1 There are 12 boys and 15 girls in a class.
One boy and one girl will be selected to represent the class on the student council.
Work out the total number of ways of choosing a boy and a girl.

(2 marks)

- 2 There are 17 boys and 14 girls in a choir.
One boy and one girl will be selected to sing a duet.
Work out the total number of ways of choosing a boy and a girl.

(2 marks)

- 3 There are 14 boys and x girls in a choir.
One boy and one girl will be selected to sing a duet.
Taylor says there are 152 different ways of choosing a boy and a girl.

Could Taylor be correct?
You must show your working.

(2 marks)

- 4 There are 5 starters and 6 main courses in a restaurant.
Work out the total number of ways of choosing a starter and a main course.

(2 marks)

- 5 There are 4 starters, 7 main courses and 4 desserts in a restaurant.
Work out the total number of ways of choosing a starter, a main course and a dessert.

(2 marks)

- 6 There are 5 starters, 6 main courses and x desserts in a restaurant.
Riley says there are 130 different ways of choosing a starter, a main course and a dessert.

Could Riley be correct?
You must show your working.

(2 marks)

- 7 A meal deal includes a sandwich and a drink.
There are 5 sandwiches and 7 drinks to choose from.
Work out the total number of ways of choosing a sandwich and a drink.

(2 marks)

- 8 Mr Idris has 5 pairs of trousers, 9 shirts and 3 ties.
Work out the total number of ways of choosing a pair of trousers, a shirt and a tie.

(2 marks)

- 9 There are 8 sandwiches and x drinks to choose from for lunch.
Pat says there are 96 different ways to choose a sandwich and a drink.
Could Pat be correct?
You must show your working.

(2 marks)

- 10 There are 52 cards in a deck.
Peter is going to give one card to Casper and one card to Kelly.

How many different ways are there of doing this?

(2 marks)

- 11** There are 52 cards in a deck.
Angel is going to give one card to Ben and one card to Chris and one card to Dylan.

How many different ways are there of doing this?

(2 marks)

- 12** There are 52 cards in a deck.
Tom is going to give two cards to Jay.

How many different pairs of cards could Jay get?

(2 marks)

- 13** There are 30 students in a class.
Two students are going to be selected to receive a prize.

How many different pairs of students could be selected?

(2 marks)

- 14** There are 10 teams in a football league.
Two teams are going to be chosen at random to play a match.

Work out the number of different matches that could take place.

(2 marks)

- 15** There are 8 teams in a competition.
Each team will play every other team once.

Work out the total number of games played.

(2 marks)

- 16** There are 10 people in a room.
Each person shakes each other person's hand once.

Work out the number handshakes that take place.

(2 marks)

- 17** There are 20 people in a room.
Each person shakes each other person's hand once.

Work out the number handshakes that take place.

(2 marks)
