- 1) Five friends have their gardens next to one another, where they grow three kinds of crops: fruits (apple, pear, nut, cherry), vegetables (carrot, parsley, gourd, onion) and flowers (aster, rose, tulip, lily).
  - 1. They grow 12 different varieties.
  - 2. Everybody grows exactly 4 different varieties
  - 3. Each variety is at least in one garden.
  - 4. Only one variety is in 4 gardens.
  - 5. Only in one garden are all 3 kinds of crops.
  - 6. Only in one garden are all 4 varieties of one kind of crops.
  - 7. Pear is only in the two border gardens.
  - 8. Paul's garden is in the middle with no lily.
  - 9. Aster grower doesn't grow vegetables.
  - 10. Rose growers don't grow parsley.
  - 11. Nuts grower has also gourd and parsley.
  - 12. In the first garden are apples and cherries.
  - 13. Only in two gardens are cherries.
  - 14. Sam has onions and cherries.
  - 15. Luke grows exactly two kinds of fruit.
  - 16. Tulip is only in two gardens.
  - 17. Apple is in a single garden.
  - 18. Only in one garden next to Zick's is parsley.
  - 19. Sam's garden is not on the border.
  - 20. Hank grows neither vegetables nor asters.
  - 21. Paul has exactly three kinds of vegetable.

Sol:

Hank: pear apple cherry rose

Sam: cherry onion rose tulip

Paul: <u>carrot</u> gourd onion rose

Zick: aster rose tulip <u>lily</u>

Luke: pear nut gourd parsley

- 2) There are 5 ships in a port:
- 1. The Greek ship leaves at six and carries coffee.
- 2. The Ship in the middle has a black chimney.
- 3. The English ship leaves at nine.
- 4. The French ship with blue chimney is to the left of a ship that carries coffee.

- 5. To the right of the ship carrying cocoa is a ship going to Marseille.
- 6. The Brazilian ship is heading for Manila.
- 7. Next to the ship carrying rice is a ship with a green chimney.
- 8. A ship going to Genoa leaves at five.
- 9. The Spanish ship leaves at seven and is to the right of the ship going to Marseille.
- 10. The ship with a red chimney goes to Hamburg.
- 11. Next to the ship leaving at seven is a ship with a white chimney.
- 12. The ship on the border carries corn.
- 13. The ship with a black chimney leaves at eight.
- 14. The ship carrying corn is anchored next to the ship carrying rice.
- 15. The ship to Hamburg leaves at six.

Which ship goes to Port Said? Which ship carries tea?

Sol:

The Spanish ship goes to Port Said and the French ship carries <u>tea</u>. However, tea can be carried by the Brazilian ship, too.

#### explination:

If you understood position 'to the right' to mean anywhere on the right side from the given point (not only right next to).

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French 5:00 tea blue Genoa
Greek 6:00 <u>coffee</u> red Hamburg
Brazilian 8:00 cocoa black Manila
English 9:00 rice white Marseille
Spanish 7:00 corn green Port Said
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3)

5 people are standing in a queue for plane tickets in Germany; each one has a name, an age, a favourite TV program, where they live, a hairstyle and a destination.

Names: Bob, Keeley, Rachael, Eilish and Amy

TV programs: The Simpsons, Coronation Street ("Corrie"), Eastenders,

Desperate Housewives and Neighbours.

Destinations: France, Australia, England, Africa and Italy

Ages: 14, 21, 46, 52 and 81

Hairstyle: Afro, long, straight, curly and bald

### Where they live: A town, a city, a village, a farm and a youth hostel

- 1. The person in the middle watches Desperate Housewives.
- 2. Bob is the first in the queue
- 3. The person who watches the Simpsons is next to the person who lives in a youth hostel
- 4. The person going to Africa is behind Rachael
- 5. The person who lives in a village is 52
- 6. The person who is going to Australia has straight hair
- 7. The person travelling to Africa watches Desperate Housewives
- 8. The 14-year-old is at the end of the queue
- 9. Amy watches Eastenders
- 10. The person heading to Italy has long hair
- 11. Keeley lives in a village
- 12. The 46-year-old is bald
- 13. The fourth in the queue is going to England
- 14. The people who watch Desperate Housewives and Neighbours are standing next to each other
- 15. The person who watches Coronation Street stands next to the person with an afro
- 16. A person next to Rachael has an afro
- 17. The 21-year-old lives in a youth hostel
- 18. The person who watches Corrie has long hair
- 19. The 81-year-old lives on a farm
- 20. The person who is travelling to France lives in a town
- 21. Eilish is not next to the person with straight hair.

#### Sol:

Name	Bob	Rachael	Eilish	Keeley	Amy
Favourite TV programme	The Simpsons	Coronation Street	Desperate Housewives	Neighbours	Eastenders
Destination	France	Italy	Africa	England	Australia
Age	46	21	81	52	14
Where they live	Town	Youth Hostel	Farm	Village	City
Hairstyle	Bald	Long	Afro	Curly	Straight

4)

There are five people - Holly, Cameron, Julieanne, Alex and Jackie.

Each one stole a special cookie of their favourite brand which was kept in a jar.

Each person ate it in a particular place and drank their flavoured milk with it.

- \* Jackie is next to the person who eats on the lounge.
- \* Arnotts brand cookies are kept in a round jar.
- \* The person beside Cameron eats cookies at a table.
- \* The person who eats Oreos eats in the closet.
- \* Julieanne likes Paradise brand cookies
- \* The person who drinks banana milk is in the middle and owns a tall jar
- \* The first person likes vanilla milk.
- \* Holly is the person on the far right
- \* The person who eats in the bedroom drinks strawberry milk.
- \* The person who owns the tall jar is next to the person who owns square jar
- \* Cameron drinks caramel milk.
- \* The person who likes the Dick Smith brand is next to the person who likes the Coles brand
- \* The person who likes the No Frills brand is next to the person who owns a round jar
- \* The person who stole the 100s and 1000s cookies is next to the person who owns the brass jar.
- \* The second person from the right eats No Frills brand and is next to the person who owns a round jar
- \* The first person on the left stole the choc chip cookies.
- \* The person who eats Dick Smith brand is next to the person who eats Paradise brand
- \* The second from the left has a brass jar
- \* Julieanne is to the right of the person who drinks strawberry milk
- \* The person who drinks chocolate milk does it at the table
- \* The Paradise brand cookies are eaten in the kitchen.
- \* The person who eats Tiny Teddies doesn't keep them in a round jar
- \* The Coles brand cookies are kept in a mini sized jar

A Ginger Cookie was also stolen. Who stole it?

Sol: Holly

## **Explaination:**

Person	Alex	Jackie	Julieanne	Cameron	Holly
Flavor	Vanilla	Strawberry	Banana	Caramel	Chocolate
<b>Cookie Jar</b>	<u>Mini</u>	Brass	Tall	Square	Round
Brand	Coles	Dick Smith	Paradise	No Frills	Arnotts
Cookie	Choc chip	Tiny Teddies	100s and 1000s	Oreos	Ginger
Place	Lounge	Bedroom	Kitchen	Closet	Table

5)
Eight married couples meet to lend one another some books.
Couples have the same surname, employment and car. Each couple has a favourite colour. Furthermore we know the following facts:

- 1. Daniella Black and her husband work as Shop-Assistants
- 2. The book "The Seadog" was brought by a couple who drive a Fiat and love the colour red.
- 3. Owen and his wife Victoria like the colour brown.
- 4. Stan Horricks and his wife Hannah like the colour white.
- 5. Jenny Smith and her husband work as Warehouse Managers and they drive a Wartburg.
- 6. Monica and her husband Alexander borrowed the book "Grandfather Joseph".
- 7. Mathew and his wife like the colour pink and brought the book "Mulatka Gabriela".
- 8. Irene and her husband Oto work as Accountants.
- 9. The book "We Were Five" was borrowed by a couple driving a Trabant.
- 10. The Cermaks are both Ticket-Collectors who brought the book "Shed Stoat".
- 11. Mr and Mrs Kuril are both Doctors who borrowed the book "Slovacko Judge".
- 12. Paul and his wife like the colour green.
- 13. Veronica Dvorak and her husband like the colour blue.
- 14. Rick and his wife brought the book "Slovacko Judge" and they drive a Ziguli.
- 15. One couple brought the book "Dame Commissar" and borrowed the book "Mulatka Gabriela".
- 16. The couple who drive a Dacia, love the colour violet.
- 17. The couple who work as Teachers borrowed the book "Dame Commissar".
- 18. The couple who work as Agriculturalists drive a Moskvic.
- 19. Pamela and her husband drive a Renault and brought the book "Grandfather Joseph".
- 20. Pamela and her husband borrowed the book that Mr and Mrs Zajac brought.
- 21. Robert and his wife like the colour yellow and borrowed the book "The Modern Comedy".
- 22. Mr and Mrs Swain work as Shoppers.
- 23. "The Modern Comedy" was brought by a couple driving a Skoda.

# Who likes Violet? And can you find out everything about everyone from this?

## Sol:

**Monica and Alexander Cermak like Violet.** 

# **Explaination:**

Names	Occupation	Car	Colour	Brought	Borrowed
Daniella and Mathew Black	Shop-Assistants	Trabant	pink	"Mulatka Gabriela"	"We Were Five"
<u>Victoria</u> a nd Owen Kuril	Doctors	Skoda	<u>brown</u>	"The Modern Comedy"	"Slovacko Judge"
Hannah and Stan Horricks	Agriculturalists	Moskvic	white	"Dame Commiss ar"	"Mulatka Gabriela"
Jenny and <u>Rober</u> <u>t Smith</u>	Warehouse <u>Mana</u> gers	Wartbur g	yellow	"We Were Five"	"The Modern Comedy"
Monica and Alexander Cermak	Ticket-Collectors	Dacia	violet	"Shed Stoat"	"Grandfat her Joseph"
Irene a Oto Zajac	Accountants	Fiat	red	"The Seadog"	"Shed Stoat"
Pamela and Paul Swain	Shoppers	Renault	green	"Grandfa ther Joseph"	"The Seadog"
Veronica and Rick Dvorak	Teachers	Ziguli	blue	"Slovack o Judge"	"Dame Commiss ar"

Alex, Betty, Carol, Dan, Earl, Fay, George and Harry are eight employees of an organization

They work in three departments: Personnel, Administration and Marketing

with not more than three of them in any department.

Each of them has a different choice of sports from Football, Cricket, Volleyball, Badminton, Lawn Tennis, Basketball, Hockey and Table Tennis not necessarily in the same order.

Dan works in Administration and does not like either Football or Cricket.

Fay works in Personnel with only Alex who likes Table Tennis.

Earl and Harry do not work in the same department as Dan.

Carol likes and does not work in Marketing.

.

George does not work in Administration and does not like either Cricket or Badminton.

One of those who work in Administration likes Football.

The one who likes Volleyball works in Personnel.

None of those who work in Administration likes either Badminton or Lawn Tennis.

Harry does not like Cricket.

Who are the employees who work in the Administration Department?

In which Department does Earl work?

Sol:

Betty, Carol and Dan work in Administration department.

Earl works in the Marketing department.