

# Disco drinks

Dancing is thirsty work so your next school disco will need a drinks stall.

Imagine that the stall will sell the drinks listed.

Ann and her four friends each have £1.50 each to spend.

## Drinks menu

- 150 ml cartons of bubble gum flavoured drink (14p each)
- 200 ml bottles of cherry aid (16p each)
- 330 ml cans of lemonade (53p each)
- 500 ml bottles of cola (57p each)
- 200 ml bottles of limeade (23p each)
- 200 ml cartons of orange juice (27p each)
- 200 ml cans of rainbow disco drink (43p each)

## Things to think about:

- Is there more than one possible solution for each challenge?
- Does it matter if the cost of the drinks is odd or even?

## Your challenge

Work out all the possibilities for:

1. what Ann could buy if she spends all of her money on 4 drinks.
2. what combinations Luke could buy if he buys over 6 drinks, but spends all of his money.
3. what different combinations Harry could buy if he spends 10p on sweets and the rest on drinks. He doesn't like cola.
4. what Max could buy if he saved 30p to spend on sweets and buys only two different types of drink.
5. what combinations Aalya could buy if she ends the night with 7p left.

## Extra challenge

Can you create your own similar problems for a friend to solve?