# Mathematical Problem Solving
## GCSE example

### Example 22

Sam and Max are organising a 60<sup>th</sup> birthday party for their grandfather.

They wish to invite as many friends and family as possible.

They have £2500 to spend.

One caterer says that the cost is £24 for each person but for over 100 people they offer a 15% discount for each person. The other caterer provides this table:

| Number of people | Cost per person |
|---|---|
| Over 100 | £21 |
| 75 - 99 | £23 |
| 50 - 74 | £25 |
| Up to 49 | £27 |

Work out the maximum number of people they can pay for.

Show working to compare the maximum number of people for **both** options.