Forming and Solving Inequalities GREEN

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| **Question 1**Eli is ordering Italian takeout for a big game night with 20 guests in attendance. A family-size lasagne will feed at least 4 guests and an extra-large one will feed at least 10 guests. Write an inequality that describes this situation.  | **Question 5**Jill has a job offer. She is offered either £50 per day, or £30 per day plus a commission of £3 for every plant she sells. How many plants does she need to sell to make the commission offer the best paying option? |
| **Question 2**Brett has a £30 online gift voucher. He plans to buy as many books as he can. The cost of each book is £4. There is also a single shipping charge of £2. How many books can he afford without spending more than his gift voucher amount? | **Question 6**Joel is looking at costs for using a gym. He could pay £50 per month for unlimited use or he could pay £12 per month plus £4 per visit. How many visits would he have to make each month to make the £50 per month unlimited use option the cheapest one? |
| **Question 3**Sue and Cath have £20 left for a cab fare home. The cab fare is £3 per mile plus a £2 fixed charge. What is the maximum number of miles they will be able to travel in the cab? | **Question 7**Sam and Alex play in the same soccer team. Last Saturday Alex scored 3 more goals than Sam, but together they scored less than 9 goals. What are the possible number of goals Alex scored? |
| **Question 4**Jennifer is planning a holiday. The hotel costs £60 per night and her flights cost £150. She has a budget of £500 for hotel and flights. Up to how many nights can she afford in the hotel? | **Question 8**Ben decides to build a rabbit run to keep his children’s rabbits in. The run will be rectangular with a width of 4 m. He has a maximum of 34 m of fencing to use, but wants the area to be greater than 50 m². Find the range of values for the length of the run, using inequalities. |

Forming and Solving Inequalities AMBER

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Forming and Solving Inequalities RED

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