

Year 11 : Inequalities

- 1)
- Peter earns $£n$ per month.
 - Jackie earns $£200$ more than Peter each month.
 - Paula earns twice as much as Peter each month.
- a) In terms of n , how much does Jackie earn?
- b) In terms of n , how much does Paula earn?
- c) If Paula earns more than Jackie, write down an inequality.
- d) What is the least amount of money Peter earns to the nearest $£$?
- 2)
- Dafydd spends $£n$ on X-mas presents
 - Sioned spends eight times as much as Dafydd.
 - Faisal spends five times as much as Dafydd plus an extra $£60$
- a) In terms of n , how much does Sioned spend?
- b) In terms of n , how much does Faisal spend?
- c) If Sioned spends less than Faisal, write down an inequality
- d) What is the most amount of money Dafydd could be spending to the nearest penny?

- 3)
- A pen costs n pence
 - A pencil costs 20p less than the pen
 - A book costs twice as much as the pen, less 80p.

- a) In terms of n , how much does the pencil cost?
- b) In terms of n , how much does the book cost?
- c) If the book costs more than the pencil, write down an inequality
- d) What is the least amount of money that the pen could cost?

- 4)
- A book weighs w kg
 - A table weighs 20 kg more than the book.
 - A chair weighs three times the weight of the book plus an extra 8 kg.

- a) In terms of w , what is the weight of the table?
- b) In terms of w , what is the weight of the chair?
- c) If the chair weighs less than the table, write an inequality that must be true.
- d) What is the greatest weight in kg that the book could weigh?