

Hints for homework Higher

Non Calculator

Qu 1

- Remember what the term outlier means
- What names do we give to the type of slope
- Draw a line of best fit
- What can you say about how the data is spread

Qu 2

- Should be straight forward remember it looks a bit like a tree
- Remember what prime numbers are

Qu 3

- Do not use a calculator I will be looking for working
- Remember just ignore the decimal point multiply out and then count the decimal places in the question it must have the same in the answer
- Remember to round up the numbers and estimate first so you can be sure your answer is in the region.

Qu 4

- Work out the area for each bit
- Form an equation
- Re-arrange

Qu 5

- Remember work out the whole length of the metal used including the diagonal
- Remember what can you apply to a RA triangle to find the long side

Qu 6

(Mr D and Mr C classes skip)

- You are used to seeing a straight line graph in the form $y=mx + c$
- Line L_1 is in this form bend L_2 until it fits the correct form and then decide are the gradients the same

Qu 7

- Remember the formula for working out a mean its in your “treasure chest”
- Remember this is a reverse mean question as the means are in the question

Qu 8

- Std form is in your “treasure chest”
- Remember you have got a big number divided by a really small number (less than 1) so the answer is enormous
- Remember your index laws for divide

Qu 9

- Its asking for the price with no vat so it's a reverse %
- Remember the formula and be careful when sorting out the decimal
- Remember you want the price before VAT so it must be smaller than 600

Qu 10

- Multiply the first 2 brackets
- And then multiply that answer by the 3rd bracket
- Remember to gather stuff together

Qu 11

- First bit easy
- Remember $f(x) = 0$ means when y
- $f(1.5)$ means find the value of the graph at 1.5

Qu 12

- Remember what the minus sign means
- Remember which bit of the fractional power to tackle first and do it to the top and the bottom

Qu 13

(Mr D and Mr C classes skip)

- Set the form of the equation up first
- Substitute variables in to workout the value of K

Qu 14

(Mr D and Mr C classes skip)

- Match the ratio of coloured shapes to the ratio of white and black circles
- Multiply the ratios
- Add the answers

Qu 15

- Re-arrange the formula to get h on its own
- Put in the values
- Analyse what happens when you put your estimates in

Qu 16

- Multiply out the squared bracket
- Sub this back in correctly and multiply out again

Qu 17

- Tree diagram

Qu 18

(Mr D and Mr C classes to skip)

- Draw on the line DB
- Remember a fact about the way diagonals in a rhombus cross
- Remember what fact you can use about perpendicular line and gradient
- Sub in the values you have

Qu 19

(Mr D and Mr C classes to skip)

- Solve how to get from A to C
- Formulate a statement for C to D

Qu 20

(Mr D and Mr C classes to skip)

- Remember this could look like a quadratic at the end
- Re-arrange the linear equation to get y on its own
- Square and sub into the circle equation
- Expand and re-arrange

Qu21

(Mr D and Mr C classes to skip)

- Remember SAS
- Make statements about the angles and the sides

Qu22

(Mr D and Mr C classes to skip)

- Need to remember standard cos of 30°
- Need to remember cosine rule
- Need to find distance from AC first
- Awful lot of algebra