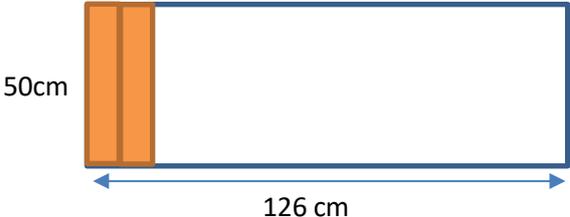


	Applications Nat 4 AVU	Non-Calculator Paper 1A
1	<p>Anna is buying a house. These are the fees she has to pay</p> <ol style="list-style-type: none"> 1. Surveyor's fee £130 2. Admin Fee £450 3. Lawyer's fee £550 <p>Calculate the total fees she has to pay</p>	
2	<p>Calculate (a) 25% of £120 (b) 4% of £120</p>	
3	<p>A coffee jug contains 1250 millilitres of coffee. If you pour one fifth ($\frac{1}{5}$) of this into a mug, then how much coffee is in your mug?</p>	
4	<p>At the World Athletic Championships the race times, in seconds, were:</p> <p style="text-align: center;">10.21 10.04 9.92 9.98 10.04</p> <p>Was the mean time for this race</p>	
5	<p>The recommended weight of toffee in a packet is $200g \pm 5g$</p> <p>(a) Write down the maximum and minimum weights which are acceptable (b) In this list of weights, which ones will be unacceptable for this tolerance</p> <p style="text-align: center;">205g, 202g, 206g, 198g, 199g, 193g, 202g, 200g, 207g</p>	
	Applications Nat 4 AVU	Calculator Paper 2A
1	<p>Eve decides to fit rectangular tiles onto a table top as shown below</p> <p>Each tile measures 50 cm by 10.5 cm The table measures 50 cm by 126 cm</p> <p>(a) How many strips will she need?</p> <p>(b) Tiles are sold in packs of five and cost £6.95 per pack. How much will it cost to completely tile this table?</p>	

2 Here is part of a train timetable

	Train 1	Train 2	Train 3
Lanark	09 52	10 22	11 52
Carluke	10 02	10 32	12 02
Wishaw	10 08	10 38	12 08
Motherwell	10 20	10 50	12 20
Glasgow	10 55	11 20	12 55

(a) Alice is travelling from Carluke to Glasgow and needs to be in Glasgow by 11 30. Which train should she take?

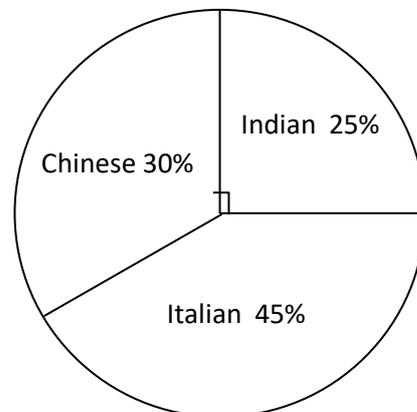
(b) There is a late afternoon train that leaves Lanark at 16 32. What time will it arrive in Glasgow?

3 Jordan is 15 years old and she is a member of Splash Health Club. She receives details of next year's subscription rates. They are as follows:

Category of member	Annual payment in full	Payment by instalments
Adult	£390	12 payments of £36
Junior (under 16 years)	£195	12 payments of £18
Husband and Wife	£695	12 payments of £65

Jordan decides to pay by instalments rather than make a one-off yearly payment. How much extra will she pay?

4 300 people were surveyed and asked for their favourite take away food. The results are shown in the pie chart.



a) How many people preferred Indian?

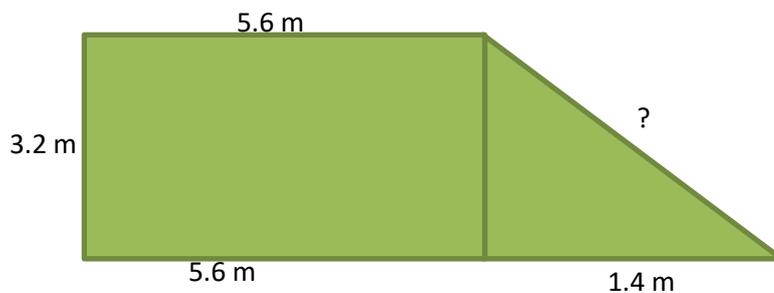
b) How many people preferred Chinese?

5 Alannah has recorded all her income and expenditure for the last month. This is shown below

Income	£	Expenditure	£
Student loan	425.00	Rent	310.00
Part time job	223.00	Mobile Phone	27.00
		Monthly bus pass	32.40
		Food	120.00
		Clothes/Hair etc	85.00
		Going out	60.00
Total Income		Total expenditure	

- (a) Calculate her total income and her total expenditure
 (b) Does Alannah has a surplus or a deficit for this month

6 Shown here is a plan for a garden



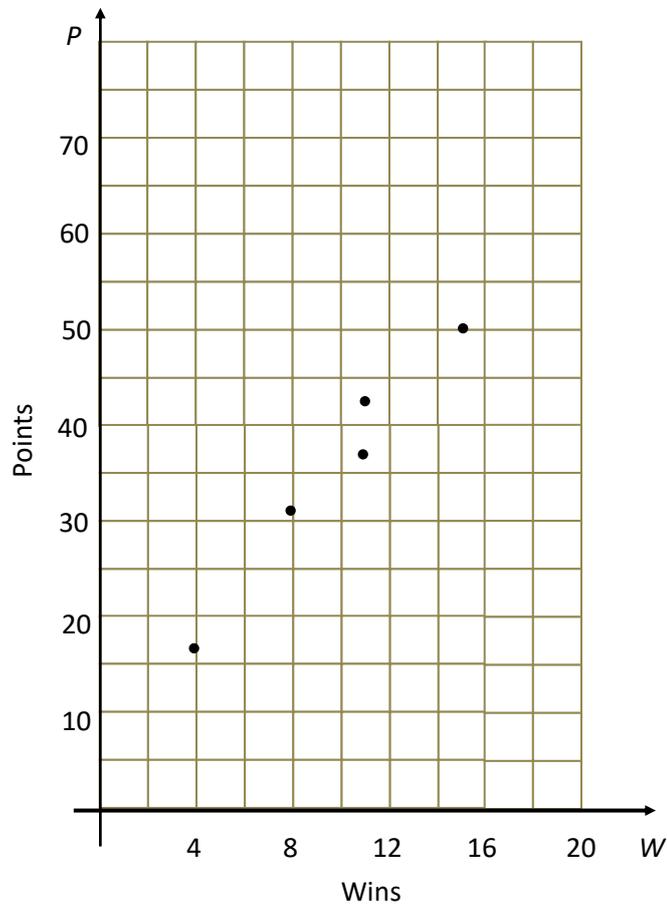
- Calculate (a) the length of the sloping side
 (b) the area of the garden

7 Charlie works at the sports centre. He is paid £8.40 per hour for a basic 35 hour week . Overtime is paid at “double time” and last week he worked 6 hours overtime.

Use this information to complete Charlie’s payslip and work out his net pay for the week.

Name: C Lewis		NI Number: NH774015b	
Income		Deductions	
Basic	£	Income Tax	£135.73
Overtime	£	National Insurance	£ 92.46
Gross Pay	£	Total Deductions	£
		NET PAY	£

- 8 A selection of the number of games won and the total points gained by teams in the Scottish Premier League were plotted on this scattergraph.



- (a) Two late results come in. One team won 14 games and scored 42 points. Another team won 6 games and scored 26 points. Mark each result on the scattergraph with an x.
- (b) Draw the line of best fit on the scattergraph.
- (c) Another team won 10 games. Use your line of best fit to estimate how many points that team were likely to have scored.