

Name:



1. The table below shows the results of survey of 54 pupils.

	Wearing a blazer	Not wearing a blazer
Boys	40	22
Girls	29	9

What is the probability that a pupil, chosen at random from this sample, will be a boy wearing a blazer? Give your answer in its simplest form. [2]

Working:

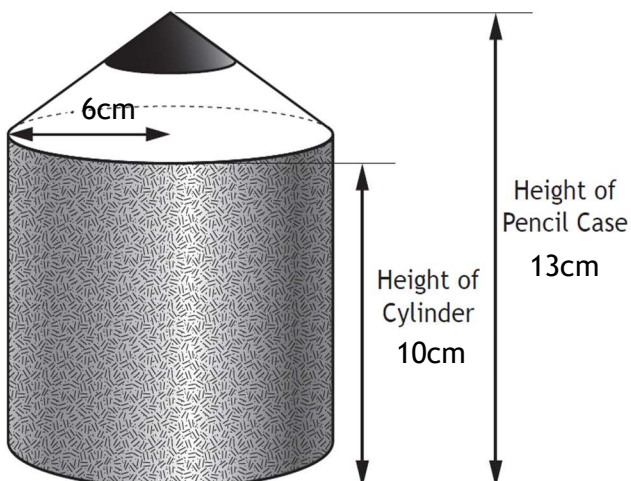
2. A group of people attended a course to help them stop smoking. The following table shows the statistics before and after the course.

	Mean number of cigarettes smoked per person per day	Standard deviation
Before	20.8	8.5
After	9.6	12.0

Make two valid comments about these results. [2]

Working:

3. Lucas has a tub for his crayons. It is in the shape of a pencil as shown below. It consists of a cylinder with a cone on top. Calculate the volume of Robbie's tub. [4]



Working:

4. (a) Robert works for 40 hours per week as a tractor driver on a farm. His basic wage is £9.60 per hour. Each week he pays £29.56 Income Tax and £9.57 in National Insurance. Calculate his take home pay. [1]

Working:

- (b) Robert is going on holiday in 9 weeks. The holiday costs £540 and Robert wants to take £190 spending money. He makes a table to show his weekly income and outgoings.

	Income	Outgoings
Take home pay		
Rent		£81
Bills		£39
Food		£55
Entertainment		£60
Transport		£43
Holiday Fund		

He puts the balance into his holiday fund. Will he have enough to cover the cost of the holiday and his spending money? **Justify your answer.** [3]

Working:

5. (a) Elaine goes on a 5 day long business trip to Oslo in Norway. She changes £750 to Norwegian kroner. The exchange rate is £1 = NOK 8. How many Norwegian kroner will Elaine receive? [1]

Working:

- (b) Elaine spends NOK 520 each day she is in Norway. Her company extends her trip by sending her to Munich in Germany for a further 3 days. If she changes all her remaining kroner to euros, at the rate £1 = € 1.20, how many euros will she have? [3]

Working:

- (c) She spends €135 each day she is in Munich. How much money does she have left at the end of her trip? [2]
Give your answer in pounds sterling.

Working: