

**N5 Lifeskills Mathematics**

**Practice Exam 4**

**Non Calculator**

1. Evaluate

$$6.04 + 3.72 \times 20.$$

2

2. Evaluate

$$3\frac{1}{6} \div 1\frac{2}{3}.$$

2

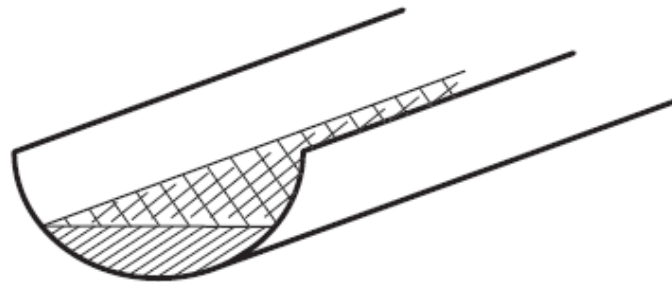
3. There are 400 people in a studio audience.

The probability that a person chosen at random from this audience is male is  $\frac{5}{8}$ .

How many males are in this audience?

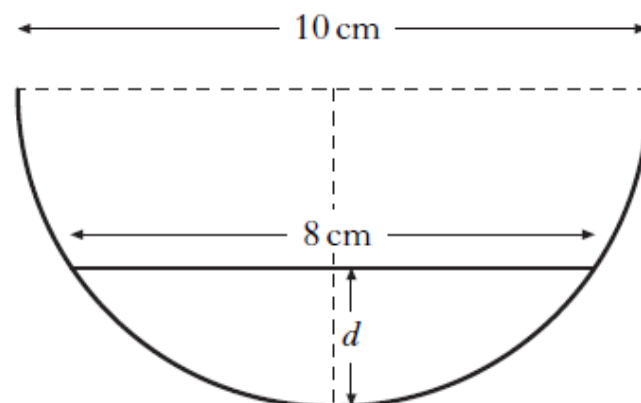
2

4. The diagram shows water lying in a length of roof guttering.



The cross-section of the guttering is a semi-circle with diameter 10 centimetres.

The water surface is 8 centimetres wide.



**Calculator**

1. Alistair buys an antique chair for £600.  
It is expected to increase in value at the rate of 4.5% each year.  
How much is it expected to be worth in 3 years?  

**3**
  
2. (a) During his lunch hour, Luke records the number of birds that visit his bird-table.  
The numbers recorded last week were:  

28   32   14   19   18   26   31.

**4**

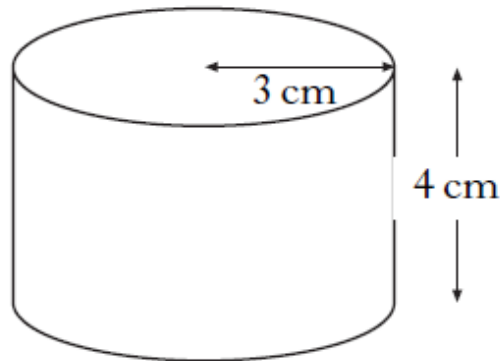
Find the mean and standard deviation for this data.
  
- (b) Over the same period, Luke's friend, Erin also recorded the number of birds visiting her bird-table.  
Erin's recordings have a mean of 25 and a standard deviation of 5.  
Make **two** valid comparisons between the friends' recordings.  

**2**
  
3. Mark takes some friends out for a meal.  
The restaurant adds a 10% service charge to the price of the meal.  
The **total** bill is £148.50.  
What was the price of the meal?  

**3**
  
4. To make "14 carat" gold, copper and pure gold are mixed in the ratio 5:7.  
A jeweller has 160 grams of copper and 245 grams of pure gold.  
What is the maximum weight of "14 carat" gold that the jeweller can make?  

**3**

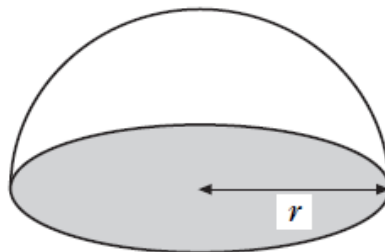
5. (a) A cylindrical paperweight of radius 3 centimetres and height 4 centimetres is filled with sand.



Calculate the volume of sand in the paperweight.

2

- (b) Another paperweight, in the shape of a hemisphere, is filled with sand.



It contains the same volume of sand as the first paperweight.

Calculate the radius of the hemisphere.

[The volume of a hemisphere with radius  $r$  is given by the formula,  $V = \frac{2}{3}\pi r^3$ ].

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