

Mathematics Workbook

Valid from April 2011 to August 2011

Functional Skills Qualification in Mathematics at Entry 3

Learner name

Learner signature and date

Work through the whole book.

- Answer every question.
- You can write or draw to show your answers in the workbook.
- You can use a calculator.

Your tutor may read the questions to you.

Ask your tutor if you do not understand any words.

You have up to 1 hour 30 minutes to complete the workbook.

Your tutor may give you objects to help you with the questions.

You will need:

- Pencil
- Ruler
- Rubber

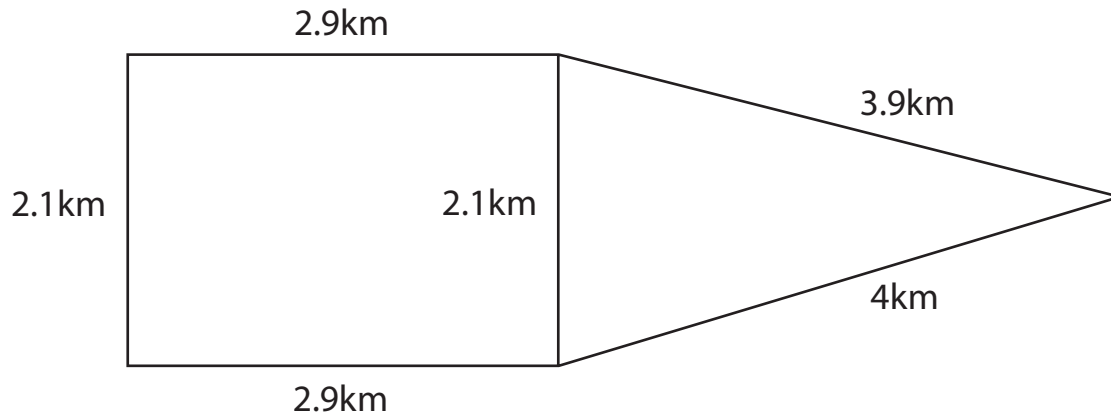
Turn over ►

The charity fun run

1: Planning the run

You are planning a charity fun run.

You must choose a route for the run.
The run must be 10km long.



Use the diagram to choose a route for the run.

Show your route in the box below.

(1)

Show how you can check that your route is 10 km.

Write your check in the box below.



(1)

The roads must close for the run.

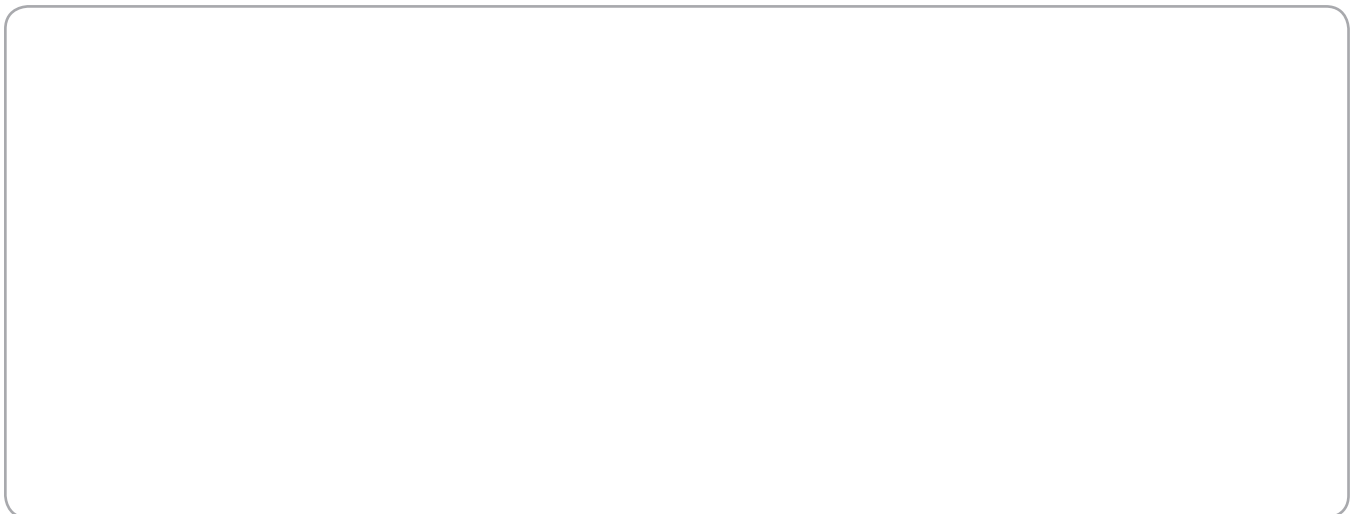
The run starts at half past ten.

The run lasts for one and a half hours.

The roads must stay closed for one more hour after the run.

What time can the roads open again?

Show your working in the box below.



(1)

368 people are running in the charity fun run.

Up to 600 people may come to watch the run.

What is the greatest total number of people that could be at the run?

Show your working in the box below.

(1)

You have to pay to close the roads for the charity run.

The table shows how much you have to pay.

Number of people at the run	You pay
Less than 400	Free
Between 400 and 799	£150
Between 800 and 1199	£250
More than 1200	£450

Use your answer to the previous question to help you.

How much do you pay to close the roads?

(1)

The runners need water to drink.

Each runner should drink 1 litre of water.

Here is a bottle of water.



How many bottles of water should each runner drink?

Write your answer in the box below.

(1)

There are 368 runners.

How many bottles of water do you need in total?

Show your working in the box below.



(1)

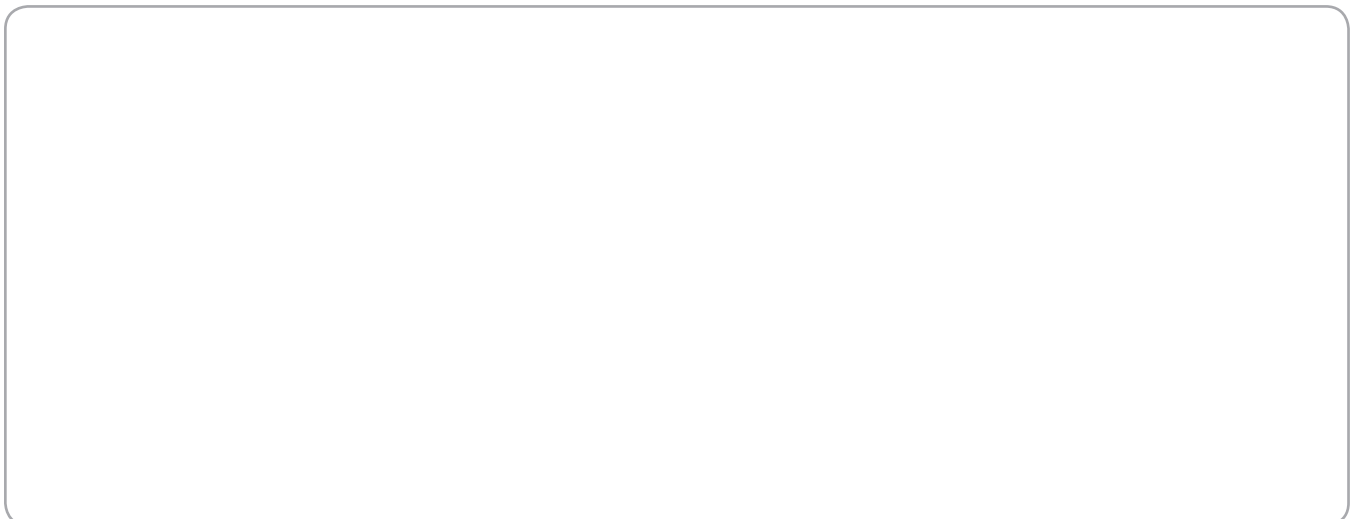
You buy bottles of water for the runners.

The bottles of water are sold in boxes.

There are 100 bottles of water in each box.

How many boxes of water should you buy?

Show your working in the box below.



(1)

You order t-shirts for the runners.

Size of t-shirt	Number ordered
Small	100
Medium	113
Large	78

How many t-shirts do you order in total?

Write your answer in the box below.

(1)

You sell the t-shirts for £3 each.

How much money will you make if you sell all the t-shirts?

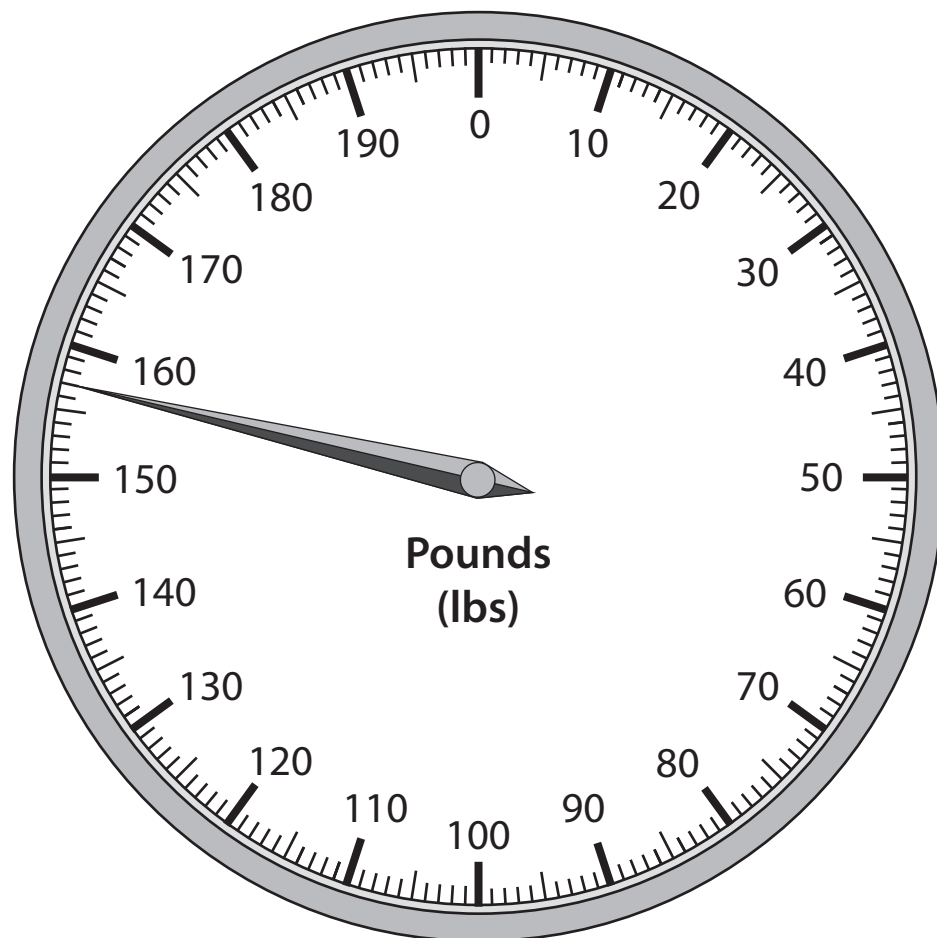
Show your working in the box below.

(1)

2: Training for the run

Bula has 5 months to train for the run.

She decides to check her weight before she starts training.



What is Bula's weight in pounds (lbs)?

Write your answer in the box below.

(1)

Bula wants to lose 35 pounds (lbs) in weight before the run.

What will Bula's weight be after she loses 35 pounds (lbs)?

Show your working in the box below.

(1)

Bula has 5 months to lose 35 pounds (lbs) in weight.
She wants to lose the same amount of weight each month.

How many pounds should Bula lose each month?

Show your working in the box below.

(1)

Bula trains by running around a race track.

The track is 400m long.

Bula runs 2 times around the track.

What total distance does Bula run?

Show your working in the box below.

(1)

3: At the run

George, Harry and Ian all take part in the run.

Here are their finishing times.

Finishing times for <i>George, Harry and Ian</i> :	
<i>George</i>	59 minutes 20 seconds
<i>Harry</i>	59 minutes 02 seconds
<i>Ian</i>	59 minutes 22 seconds

Who had the fastest finishing time?

Write your answer in the box below.

(1)

Betty stopped running half of the way through the run.
Desmond stopped running three quarters of the way through the run.

Which of Betty or Desmond ran the furthest distance?
Explain your answer.

(2)

You give a medal to all the runners who finish the run.



How many right angles does the shape of the medal have?

Write your answer in the box below.

(1)

Ed's mother sponsors him 25 pence for every kilometre he runs.
Ed's friend sponsors him £3 to finish the run.

Ed finishes the 10 kilometre run.

How much sponsorship money does Ed's mother give him?

Write your answer in the box below.

(1)

What is the difference between the money Ed's friend gives him and the money his mother gives him?

Show your working in the box below.

(1)