## Functional Skills Mathematics Level 1 (Set 3)

PLEASE SIGN AND DATE BELOW TO CONFIRM DETAILS AND YOU UNDERSTOOD THE INSTRUCTIONS

| First name: | Joe |
| :--- | :--- |
| Family name: | Blogs |
| Student number (ULN): | 0 |
| Centre number: | 0 |
| Date of birth: | $06 / 05 / 1972$ |
| Signature: |  |
| Today's date: |  |

## Functional Skills - Awarding Consortium

Functional Skills Mathematics - Level 1

## PLEASE READ THE TEXT BELOW CAREFULLY BEFORE COMMENCING THE ASSESSMENT

## INSTRUCTIONS AND GUIDANCE

- The test includes three tasks.
- The total number of marks is: 45 marks.
- The number of marks available for each question is shown in brackets.
- You have 2 hours to complete the assessment.
- The invigilator will monitor the time and inform you when the test finishes at which point you must stop working.
- You should attempt to complete all of the tasks.
- You should plan your work carefully and be aware of the time available to complete the assessment.
- You should show your workings in the "Workings" spaces provided on the assessment paper. These will be assessed.
- You should write on the printed side of the assessment paper only. Work completed on the other side will not be taken into consideration by the marker.
- You may use a standard portable calculator.

The allocation of marks for each task is shown in the table below

| Task | Mark |
| :--- | :--- |
| 1 | 16 |
| 2 | 15 |
| 3 | 14 |
| Total |  |
|  | 45 |
|  |  |

## Task 1

Total marks available

## Task 1 - Awards ceremony

 16 marksTheo is organising an awards ceremony for members of the local youth centre.
He has hired a hall which must close at 11 pm . Theo has made these notes about the event.

|  |  |
| :--- | :--- |
|  | presents awards : $1 / 4$ hours |
|  |  |
|  | set up equipment $: 30 \mathrm{mins}$ |
|  | clear equipment and tidy up : 20 mins |
|  | buffet (before awards) $: 1 \mathrm{hr}$ |
|  |  |
|  | dancing (afterwards) $: 50 \mathrm{mins}$ |
|  |  |

Theo wants the night to include all the events in his notes and needs to start after 7.30pm.

## Question 1

Create a timetable for Theo showing all the activities in order and the time when they should start. Can Theo start the awards evening after 7.30pm?

## Workings

## Answer:

$\qquad$
$\qquad$
$\qquad$
$\qquad$

Theo needs to calculate the cost of the hall he is hiring for the awards ceremony.
He uses these instructions:

## Time spent in the hall



## Question 2

Use the information you calculated in Question 1 and the instructions above to find the cost of hiring the hall.

## Workings

## Answer:

Theo will be offering a free glass of fresh juice to each of the 150 guests attending the ceremony. He expects to get 5 glasses from every carton of juice. Theo thinks 25 cartons will be enough.

## Question 3

Work out if Theo is correct.

## Workings

## Answer:

## 

Theo gets a quote from a catering company for the buffet.
They say they can supply enough food for 150 people at a cost of $£ 3$ per person.
There is also a $10 \%$ discount for orders over $£ 400$.

## Question 4

How much will the buffet cost?

## Workings

## Answer:

## Task 2

Total marks available

## Task 2 - Getting to work

15 marks

Tracy has been asked to research how her workmates get to and from work.
She asked 32 of her workmates and gathered this information:
Q3

| Type of transport | Number of people | Fraction of people |
| :--- | :--- | :--- |
| Walk | 4 | $1 / 8$ |
| Bus | 8 |  |
| Cycle | 8 |  |
| Car | 12 |  |

Tracy wants to represent this information in a pie chart.
She finds this blank chart which has 16 sectors to help her draw the chart without using a protractor.


## Question 5

Complete the table and fill in the pie chart to represent the information. Make sure to label it correctly.

## Workings

Tracy's supervisor wants to know how much of the workforce walk or cycle to work.
She hopes it is more than $50 \%$.

## Question 6

Do more than $50 \%$ of the workers in this research walk or cycle to work?

## Workings

Answer:

Tracy counts the number of bicycles in the parking area outside her workplace once a day on a typical week.

These are her findings from Monday to Friday over one week.

$$
\begin{array}{lllll}
9 & 5 & 7 & 10 & 9
\end{array}
$$

## Question 7

Calculate the mean of this data.
Is it likely that a minimum of 8 people regularly cycle to work based on these figures?

## Workings

## Answer:

## Task 3

Total marks available

Task 3 - Children's party
14 marks

The MacDonald family are holding a children's party in their garden. This is a plan of the garden.


They will be hiring a bouncy castle which is 3 metres square. They are also hiring a slide which is 4 metres long and 1 metre wide.

There must be a gap of at least 50 centimetres between the bouncy castle and slide, and both must be at least 50 centimetres from the garden fence or the house.

## Question 8

Draw the bouncy castle and the slide on the grid to show how both can fit into the garden.


## Workings

Mrs MacDonald is told that the bouncy castle and the slide must not take up more than half of the garden for safety reasons.

## Question 9

Calculate the areas of the bouncy castle, the slide and the garden.
Does the equipment take up more than half the garden area?

## Workings

## Answer

## 

The cost of hiring both the bouncy castle and the slide is $£ 45$ for 4 hours, plus $£ 8.75$ for every extra hour.

Mr MacDonald would like to hire the equipment for 6 hours.

## Question 10

Calculate the cost of hiring the equipment and check one of your calculations using a suitable method.

## Workings

## Answer:

[ End of test ]

