

## NCFE Level 2 Functional Skills Qualification in Mathematics (603/5060/X)

Paper number: SAM  
Section A: Non-calculator Test



**Time allowed:** 30 minutes

### Learner instructions

- Answer **all** questions.
- Read each question carefully.
- Write your answers in the spaces provided.
- Show your working, as marks may be awarded for working.
- State units in your answers, where appropriate.
- Check your work.

### Learner information

- Section A contains **Activity 1** only.
- The maximum mark for this section is **15**.
- The marks available for **each** question are shown in brackets.

To be completed by the examiner		Mark
A	Activity 1	/ 15
B	Activity 2	/ 15
	Activity 3	/ 15
	Activity 4	/ 15
TOTAL MARK		/ 60

### Resources

You will need a:

- pen, with black or blue ink
- pencil and eraser
- 30 cm ruler
- protractor.

If extra pages are used, please make sure your name and centre name are on them and they are securely fastened to this booklet.

**Please complete the details below clearly and in BLOCK CAPITALS.**

Learner name \_\_\_\_\_

Centre name \_\_\_\_\_

Learner number

Centre number

**Do not turn over until the invigilator tells you to do so.**



SAMPLE

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## Activity 1: Flat share

1 (a) Alex, Jas and Stef are students. They are looking for a flat to share.

They see these adverts online:

3 bedroom flats in Upton:	3 bedroom flats in Downton:
£433 per month	£368 per month
£450 per month	£425 per month
£395 per month	£412 per month
£475 per month	£330 per month
£389 per month	£447 per month
£375 per month	

What percentage of the flats in Downton cost over £420 per month?

[1 mark]

Your answer:	%

1 (b) They want to know which location is the cheapest.

Use the median monthly rental prices to show which location is the cheapest.

**Show your working.**

[3 marks]

Your answer:	£

Please turn over

1 (c) Alex, Jas and Stef each get a student loan to help with living expenses.

They decide to allocate two fifths of their loans for food, and one-sixth for travel.

What fraction of their student loan will be left to spend?

[2 marks]



Your answer:



1 (d) The students work out that together they have £5400 each year to spend on rent.

They find a flat to rent that will cost £5200 per year.

If the rent **increases by 2%** next year, will it still be within their budget?

**Show your working.**

**[2 marks]**

Working area for the calculation.

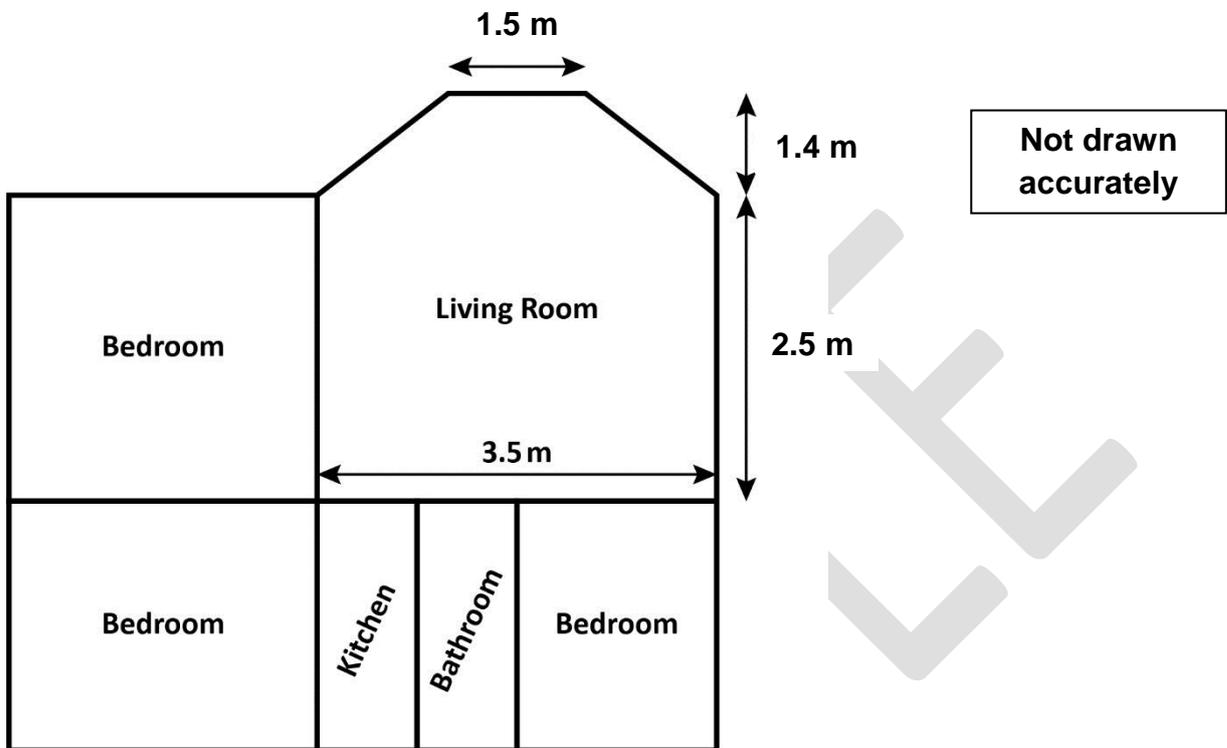
Your answer:

Answer box.

**Please turn over**

1 (e) The plan shows a flat the students like.

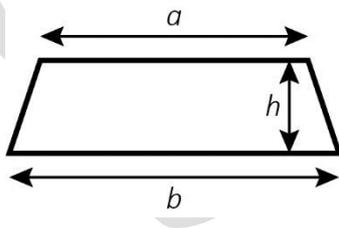
The living room has a trapezium-shaped bay window.



The landlord will replace the carpet in the living room with new flooring, as long as it costs £250 or less.

The new flooring costs £20 per  $\text{m}^2$

The formula for finding the area of a trapezium is:  $\frac{(a+b)}{2} h$



Will the landlord replace the carpet with the new flooring?

**Explain your answer.**

**[4 marks]**

SAMPLE

**Please turn over**

1 (f) Alex, Jas and Stef decide to rent a different 3 bedrooomed flat.

They choose their bedrooms.

- Alex's bedroom has an area of  $12 \text{ m}^2$
- Jas's bedroom has an area of  $18 \text{ m}^2$
- Stef's bedroom has an area of  $20 \text{ m}^2$

They decide to share the rent between them:

**Option 1** – Share the rent **equally** between them

**Option 2** – Share the rent **based on the area** of their bedrooms.

Which option will work out cheapest for Jas?

**Show your working.**

[3 marks]

SAMPLE

Your answer:

Option

[Total marks: 15]

**This is the end of Section A.**

