



Level 1 Certificate in Essential Skills Application of Number



www.cityandguilds.com
January 2018
Version 1.1

Sample 3

Candidate Name (First, Middle, Last)

Candidate enrolment number DOB (DDMMYYYY)

Candidate signature and declaration*

Assessment date (DDMMYYYY) Centre number

Length of assessment:
1 hour 30 minutes

You should have the following for this assessment

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

- You may use a calculator.
- You may use a protractor.
- You may use a dictionary.

General instructions

- There are **3** tasks to complete.
- You should spend an equal amount of time on each task.
- Read through each task carefully.
- Show your working out. You may get marks for it.
- Check your calculations.
- Remember to put units on your answers.
- Write all working out and answers in this booklet.
- There are additional pages at the back of this booklet if you run out of space.



Task 1 Halloween party

There are **15** marks available for this task.

You should check all your work as you go along.

Introduction

This task is about planning a Halloween party.

You agree to organise the firework displays and music.

You have a fireworks licence for the party.

1A

You have a budget of up to £2000 to spend on fireworks. You must spend at least £1800

There will be **two** firework displays, one near the start and one near the end of the party.

Fireworks City
Choose one or more packs to make up your display.
Do not split packs.

- Quantum Pack → £1345 for one 25-minute display
- Mega Pack → £675 for every 10 minutes of your display
- Super Pack → £65 for every minute of your display

Choose fireworks for the **two** displays and work out the **total** cost of the fireworks.

Complete the table.

Show your working

	Fireworks packs	Quantity	Cost (£)
Display 1			
Display 2			
Total cost			£

(3 marks)



1B

Check one of your calculations in **1A**.

Check it by a **different** method to the one you used originally.
You can use approximation, a reverse calculation or any other suitable different method.

Write your check here

(1 mark)

1C

How long will each of your firework displays last?

Space for working

Display 1 lasts for _____

Display 2 lasts for _____

(2 marks)

1D

Here are your notes for planning the party.

- Party starts with a parade at 6:30pm and lasts for 1 hour.
- 1st fireworks display starts 30 minutes after the end of the parade.
- Two bands will perform music, one after the other, between the two firework displays. Allow half an hour per band.
- Party ends 20 minutes after 2nd firework display.

Work out the time each band will start.

Show your working

First band starts at _____

Second band starts at _____

(3 marks)





1E

Draw a timetable for the party. Include the times for

- the parade
- the firework displays
- each band performance
- the finishing time of the party.

(4 marks)

1F

You need to get tickets printed for the party.

You will have 600 tickets printed.

The organisers tell you to order tickets in the ratio of 3 adult tickets to 1 child ticket (3:1).

Work out how many adult tickets and how many child tickets to order.

Show your working

Adult tickets _____

Child tickets _____

(2 marks)





Task 2 Covers for cushions

There are **15** marks available for this task.

You should check all your work as you go along.

Introduction

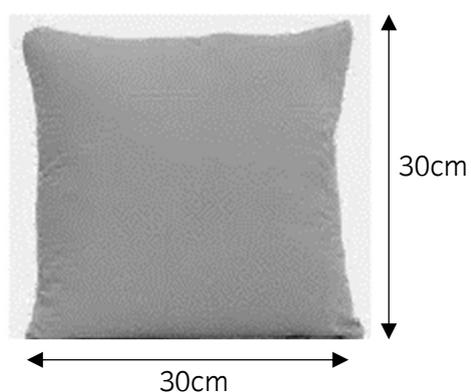
This task is about making covers for cushions.

You need to plan how to cut pieces of material to make the covers.

2A

You want to make some square cushion covers.

Each cover is made from **two** pieces of material (one piece for the front and one piece for the back).



For each piece of material you must add an extra 2cm of material to all of the sides to join the pieces together.

Draw a rough sketch (not to scale) of **one** piece of material with the extra material added on. Label the dimensions.

Draw your sketch here

(2 marks)



2B

You want to make **two** cushion covers.

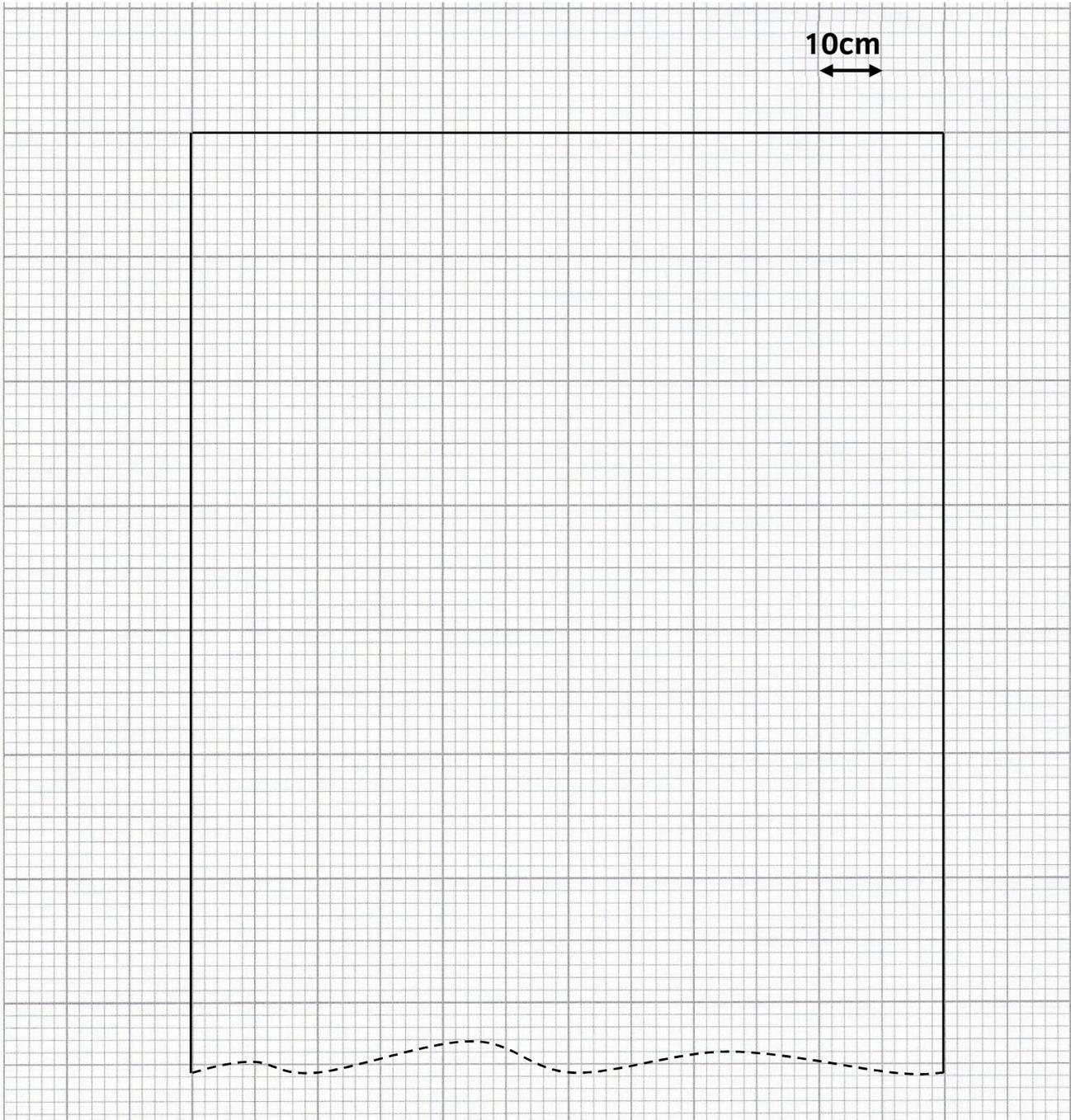
You need **two** pieces of material for **each** cover (one for the front and one for the back).

You will cut the four pieces of material for the covers from a large piece of material 120cm wide.

Draw the **four** cushion cover pieces to scale on the diagram below.

Scale diagram of large piece of material 120cm wide

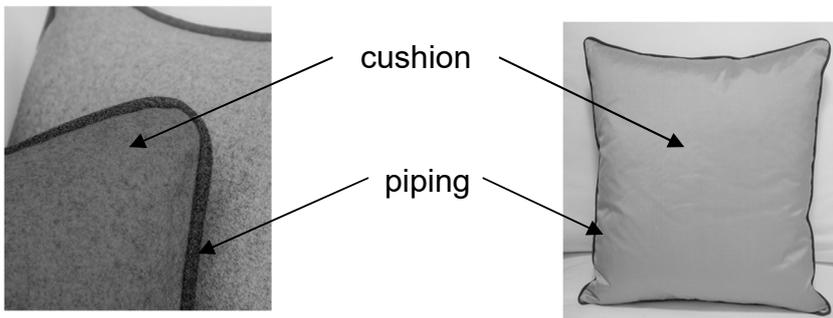
(4 marks)





2C

Each cushion will have a coloured strip (called piping) all around the edge.



The length of the side of the cushion is 30cm

This formula works out how much piping you need.

$$\text{Length of piping} = 4 \times \text{side length of cushion} \times \text{number of cushions}$$

How much piping will you need for the **two** cushions?

Make sure you put the units on your answer.

Show your working

Length of piping _____

(3 marks)



2D

Each cushion needs one **30cm coloured metal** zip.

Use this price list to find the cost of **two** zips.

Length of zip	Silver metal zip price each (£)	Coloured metal zip price each (£)	Coloured plastic zip price each (£)
15cm	1.70	1.80	1.65
20cm	1.85	1.95	1.80
30cm	2.19	2.29	1.99
40cm	2.55	2.69	2.50
50cm	2.75	2.85	2.70
60cm	3.00	3.10	2.95

Show your working

Cost for two zips £ _____

(2 marks)

2E

The shop only sells material and piping in **whole metres** or **half metres**.

The material costs £12.60 per metre.

The piping costs £1.80 per metre.

You will buy

- 1.5m of material
- enough piping for the **two** cushions (**2C**)
- two zips (**2D**).

Work out the total cost for the two cushion covers.

Show your working

Total cost £ _____

(4 marks)



Task 3 Selfies

There are **15** marks available for this task.

You should check all your work as you go along.

Introduction

This task is about 'selfies' – pictures people take of themselves and are often shared on the internet.

3A

A local newspaper report says your town is the selfie capital of the UK.

Our town – the selfie capital of the UK
Reports show that people in our town take an average of 10 selfies a month.
This is two more than any other town in the UK.

You decide to see whether or not the newspaper report is correct.

You ask your friends to check their mobile phone to see how many selfies they took last month. The tables show the results.

How many 'selfies' did you take last month?			
16	20	18	11
28	15	19	19
14	29	21	22
11	20	1	24
10	7	29	26

Find the average (mean) numbers of selfies your friends took last month.

Show your working

Mean _____

(3 marks)

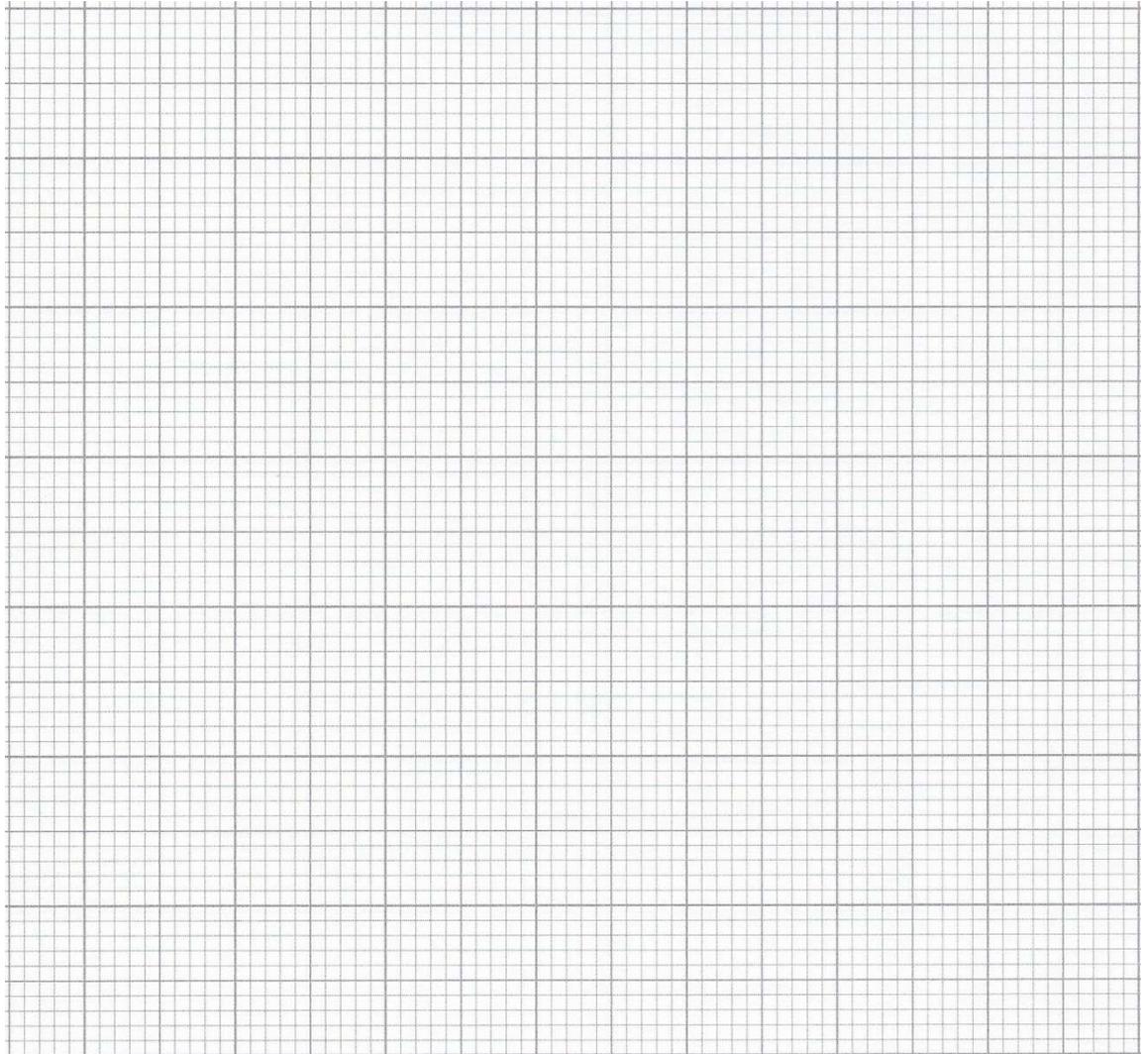




3B

Draw a suitable chart to show the average (mean) numbers of selfies your friends took and the average (mean) in the newspaper report.

(4 marks)



3C

Is the newspaper report true?

Explain your answer.

<table border="1" style="display: inline-table;"><tr><td style="padding: 5px;">Yes</td><td style="width: 20px; height: 15px;"></td></tr></table>	Yes		<table border="1" style="display: inline-table;"><tr><td style="padding: 5px;">No</td><td style="width: 20px; height: 15px;"></td></tr></table>	No	
Yes					
No					
(Tick one box)					
Explanation					

(1 mark)



3D

Find the range of the numbers of selfies your friends took last month.

Show your working

Range _____

(2 marks)

3E

What do your results for the ranges show about the numbers of selfies taken by your friends?

Make **one** comment.

Comment

(1 mark)

3F

The newspaper report goes on to say:

Females take more selfies – twice as many as males.

From the newspaper report, how likely is it that the next person to take a selfie will be a male?
Explain your answer.

The chance (probability)

impossible	<input type="checkbox"/>	unlikely	<input type="checkbox"/>	50/50 chance	<input type="checkbox"/>	likely	<input type="checkbox"/>	certain	<input type="checkbox"/>
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(Tick one box)

Explanation

(2 marks)

3G

This table shows the number of selfies your friends took.

Males		Females	
16	20	18	11
28	15	19	19
14	29	21	22
11	20	1	24
10	7	29	26

The newspaper report says females take twice as many selfies as males. Is this true for your friends?

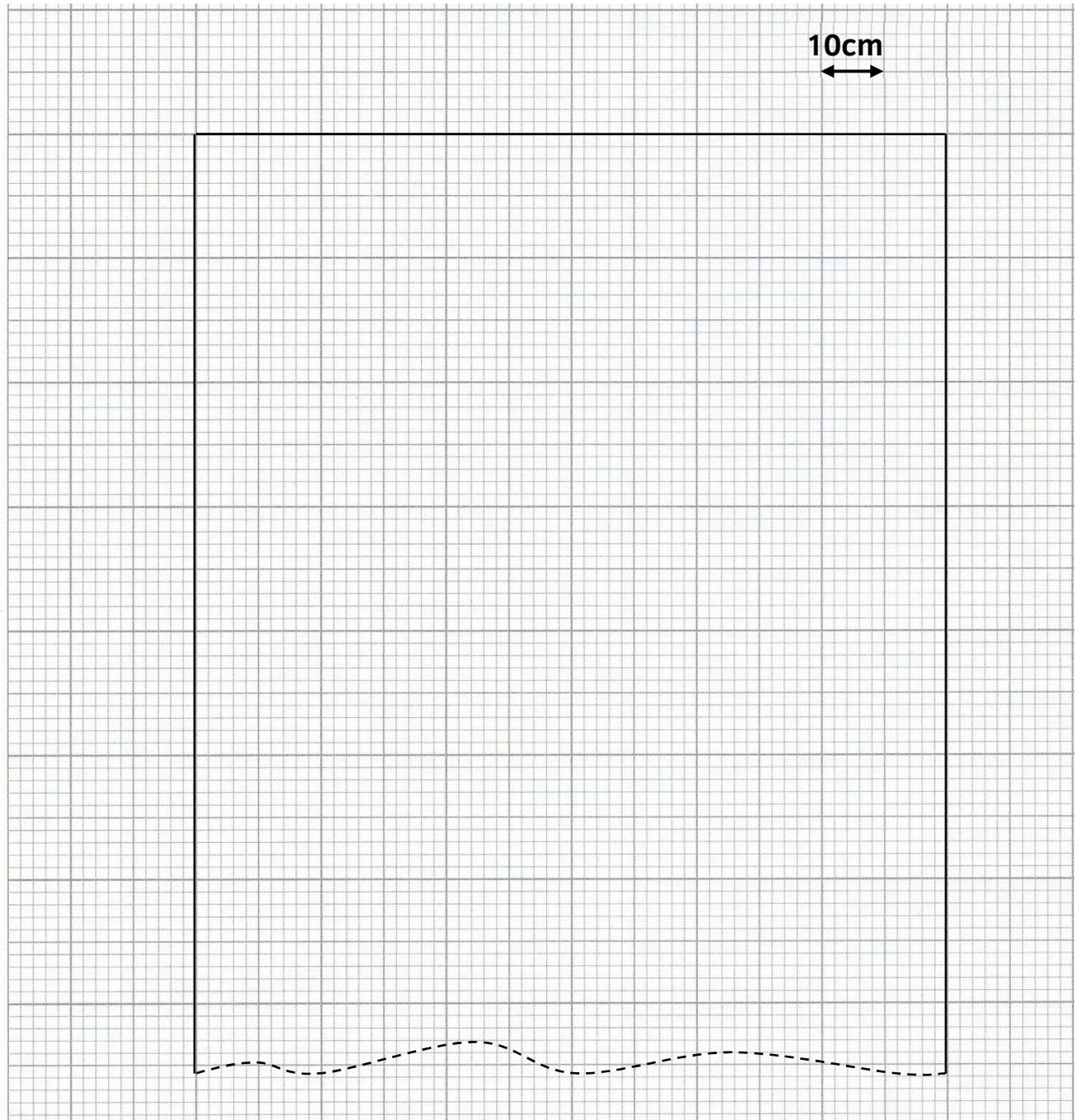
Explain your answer.

Total for males _____					
Total for females _____					
<table border="1"><tr><td>Yes</td><td><input type="checkbox"/></td></tr></table>	Yes	<input type="checkbox"/>	<table border="1"><tr><td>No</td><td><input type="checkbox"/></td></tr></table>	No	<input type="checkbox"/>
Yes	<input type="checkbox"/>				
No	<input type="checkbox"/>				
(Tick one box)					
Explanation					

(2 marks)

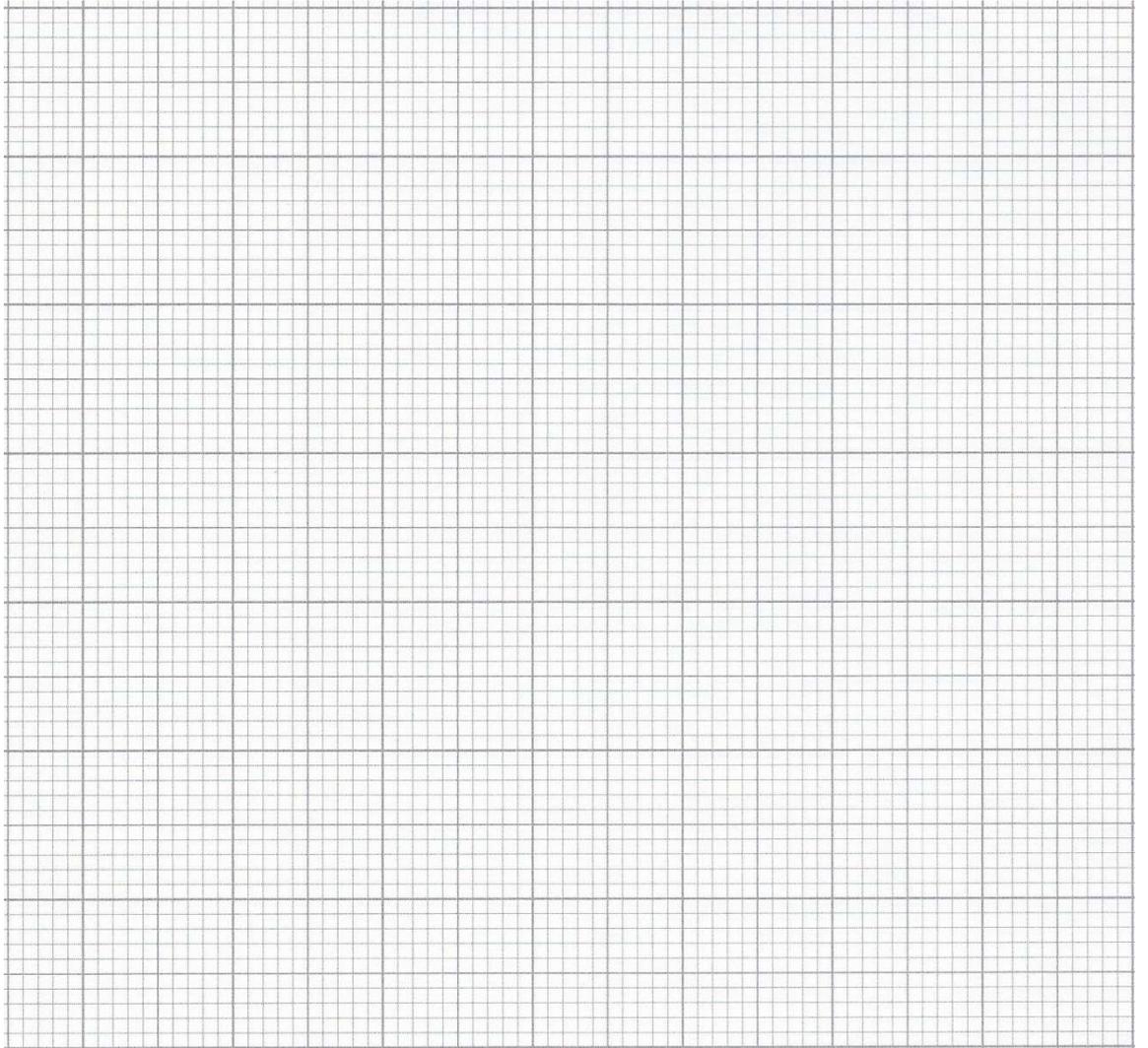


Spare graph paper for 2B only





Spare graph paper for 3B only





Extra space for working out and answers



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