

United Curriculum

End-of-Year Assessment 2023-24

Mathematics

Time: 1 hour

Year 8

Paper 1 – Non-calculator assessment

Student surname:

Student first name(s):

Class Name / Number:

You must have: a pencil, tracing paper and a protractor.



Instructions

- Fill in the boxes on the front page.
- Use a black ink pen. Draw diagrams in pencil.
- Do not use a calculator.
- The marks for each question are shown.
- Answer the questions in the space provided.
- Show **clearly** how you work out your answer.
- Do all rough work in this book. Cross through any work you do not want to be marked.

Advice

- Read each question carefully before you begin.
- Try your best to answer every question. If you have time, go back and review your answers.

For Teacher use only:

TOTAL MARKS	PERCENTAGE
	60

Question 1

Write down

$$\sqrt{64}$$

Answer =

	1
--	---

Question 2The factors of 40 are listed below. Circle **all** the **prime factors**.

1 2 4 5 8 10 20 40

	1
--	---

Question 3

Work out

$$921 - 265$$

Answer =

	1
--	---

Question 4

Work out

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

Answer =

	1
--	---

Question 5

Write down

5a. Round 146 to the nearest 100

Answer =

.....

	1
--	---

5b. Round 3.883 to one decimal place

Answer =

.....

	1
--	---

Question 6

Write these in order of size, starting with the smallest.

 $\frac{3}{4}$ 7 0.7 73.5%

Answer =

.....

	1
--	---

Question 7

Calculate the median

11 4 13 4 22 15

Answer =

.....

	2
--	---

Question 8

Convert

8a. *30mm to cm*

Answer =

.....

	1
--	---

8b. *2.3km to m*

Answer =

.....

	1
--	---

8c. *3780ml to litres*

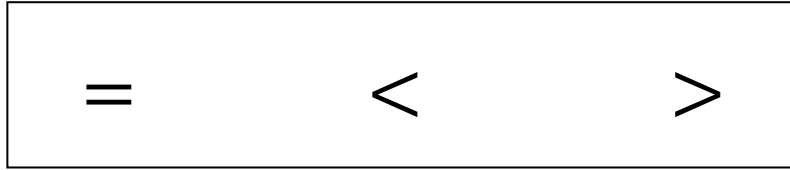
Answer =

.....

	1
--	---

Question 9

The box below contains three mathematical symbols.



From the box, choose a symbol to make the following statements correct.

9a. -7×-3 $-10 + 33$

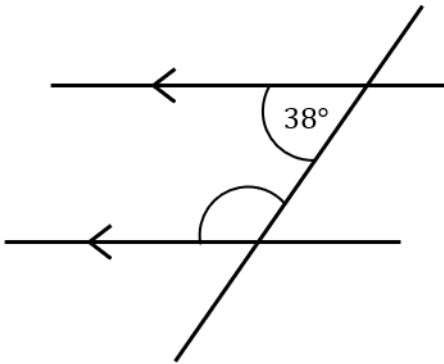
	1
--	---

9b. $-15 \div 3$ $-3 - 2$

	1
--	---

Question 10

10a. Find the missing angle. Give a reason for your answer.

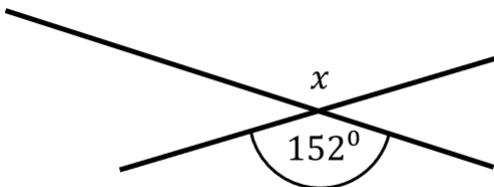


Answer =

Reason =

	1
--	---

10b. Find x . Give a reason for your answer.



Answer =

Reason =

	1
--	---

Question 11

Work out

11a. $\frac{2}{5} + \frac{3}{10} =$

Answer =

.....

	1
--	---

11b. $\frac{5}{6} - \frac{1}{4} =$

Answer =

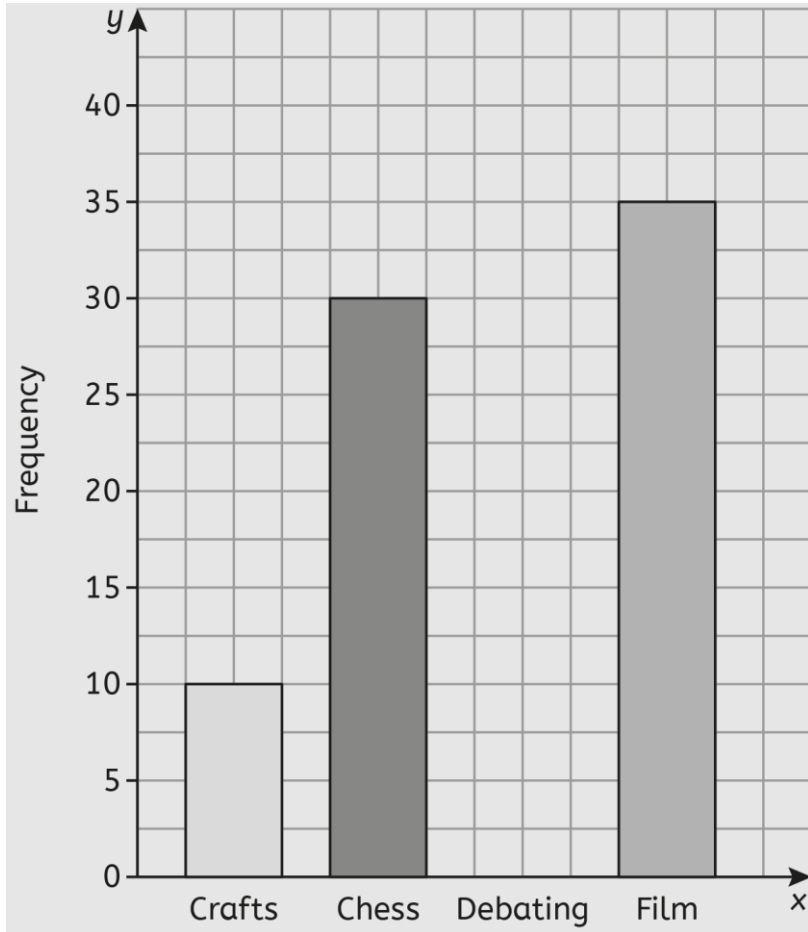
.....

	2
--	---

Question 12


The bar chart shows number of pupils in each school club.

There are 100 pupils in total.



Complete the bar chart and the pictogram to show the information.

Information from *Crafts* has been completed for you.

Crafts	
Chess	
Debating	
Film	

Key

	4
--	---

Question 13

13a. Decrease 40 by 10%.

Answer =

	1
--	---

13b. Increase 60 by 15%.

Answer =

	2
--	---

Question 14

There are 374 people at a conference.

Lunch is served to everyone at a cost of £17 each.

What is the total cost for lunch?

Answer =

	2
--	---

Question 15

Find the value of x for each of the equations below.

15a. Calculate

$$\frac{x}{4} = 7$$

Answer =

.....

	1
--	---

15b. Calculate

$$5x - 3 = 12$$

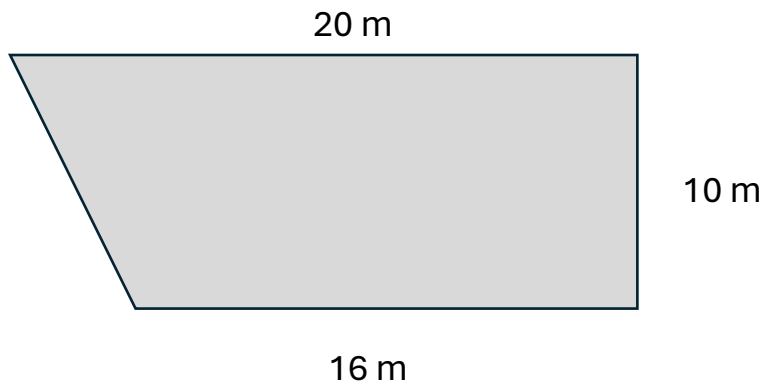
Answer =

.....

	2
--	---

Question 16

Here is a diagram of Megan's garden.



Megan wants to cover her garden with grass seed to make a lawn.

Grass seed is sold in bags.

There is enough grass seed in each bag to cover 20 m^2 of garden.

Each bag of grass seed costs £5.

Work out the lowest cost of putting grass seed on Megan's garden.

Answer =

	4
--	---

Question 17

Paul, Jess and Rooda share some money in the ratio 5:3:2.

Jess gets £18.

How much money was there in total?

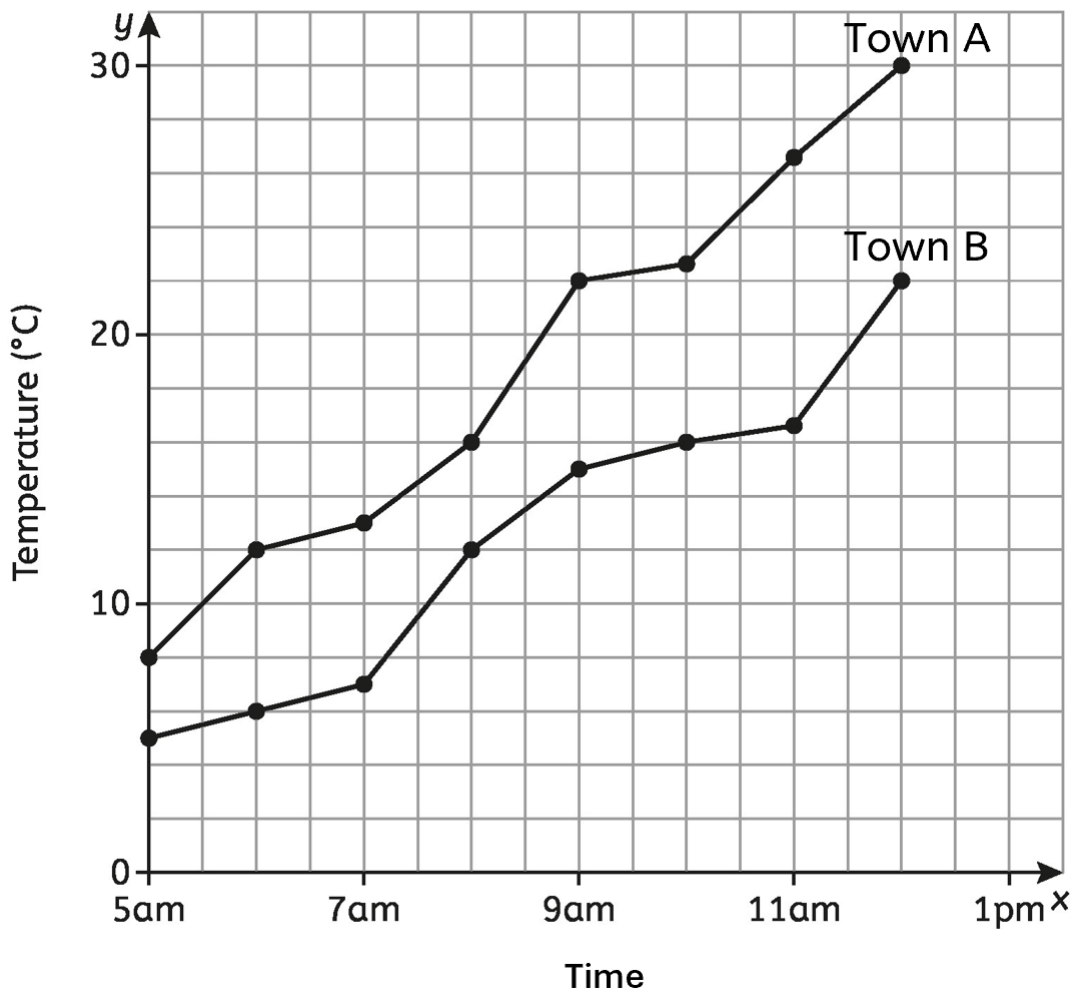
Answer £

.....

	2
--	---

Question 18

The graph shows the temperature in two towns between 5am and 12pm.



18a. Estimate the time when the temperature reached 20°C in town A.

Answer =

	1
--	---

18b. What was the difference in temperature between Town A and Town B at 9am?

Answer =

	1
--	---

Question 19

Work out $2\frac{3}{4} \div 1\frac{1}{5}$

Give your answer as a mixed number.

Answer =

.....

	3
--	---

Question 20

20a. Write 120 as a product of its prime factors.

Give your answer in simplified index form.

Answer =

.....

	3
--	---

20b. The prime factorisation of $96 = 2^5 \times 3$

Hence or otherwise, find the highest common factor of 96 and 120.

Answer =

.....

	1
--	---

Question 21

Which is bigger, 2^3 or $\sqrt{68}$?

Give a reason for your answer.

	2
--	---

Question 22

Chen receives a pay rise of 10%.

Chen now earns £13.20 per hour.

How much money did Chen earn per hour before the pay rise?

Answer £

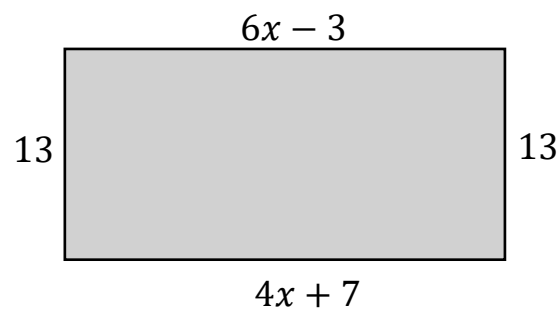
.....

	2
--	---

Question 23

A rectangle is shown below. All measurements are in *cm*.

Find the perimeter of the rectangle.



Answer = cm

	5
--	---

Question 24

Jo made 60 necklaces.

She sells $\frac{1}{4}$ of the necklaces for £8.

She sells 40% of the remaining necklaces at a reduced price of £6.

How much money has Jo made?

Answer £

.....

	5
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END OF ASSESSMENT

This is the end of the assessment.
There are no questions printed on this page.

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