

# United Curriculum

## End-of-Year Assessment 2023-24

### Mathematics

Time: 1 hour

Year 7

Paper 1 – Non-calculator End-of-Year 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.

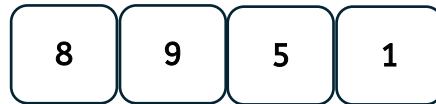
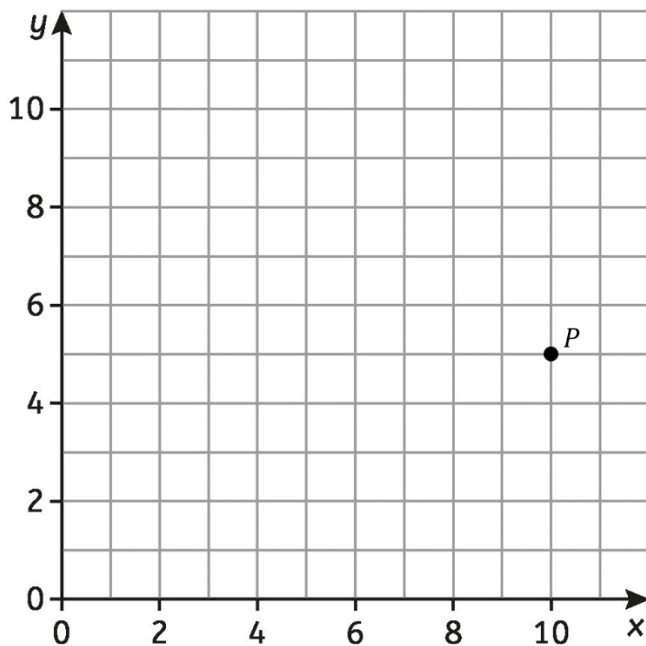
For Teacher use only:

TOTAL MARKS	PERCENTAGE
	60

**Question 1**

Dana arranges four cards to make the number 8 951.

Rearrange the cards to make the smallest possible even number.

**Question 2**

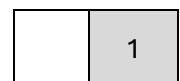
2a. The point  $Q$  has co-ordinate  $(3,7)$ .

Mark point  $Q$  on the grid.



2b. Write down the co-ordinate of point  $P$ .

Answer = \_\_\_\_\_



**Question 3**

Kinder Eggs come in packs of 3.

There are 24 children going to a party.

Each child needs to be given a Kinder Egg.

How many packs are needed?

Answer =

.....

	1
--	---

**Question 4**

Work out

4a.  $7 \times (8 - 3)$

Answer =

.....

	1
--	---

4b.  $4 + 2 \times 9 \div 3$

Answer =

.....

	1
--	---

**Question 5**

Write down

5a. All the factors of 12

Answer = .....

	1
--	---

5b. Any two multiples of 8

Answer = .....

	1
--	---

5c. The smallest prime number

Answer = .....

	1
--	---

**Question 6**

Simplify fully

6a.  $p + p + p + p$

Answer =

.....

	1
--	---

6b.  $p \times p$

Answer =

.....

	1
--	---

6c.  $3x \times 6y$

Answer =

.....

	1
--	---

**Question 7**

Pupil A says



I know that the number  
2 034 702 is divisible by 3 with no remainders.

I don't need to do any working out.

How does **Pupil A** know this?

	1
--	---

**Question 8**

8a. Write down any fraction that is equivalent to  $\frac{3}{5}$

Answer =

.....

	1
--	---

8b. Write these fractions in **ascending** order.

(**Ascending** means from smallest to largest.)

$$\frac{1}{2}$$

$$\frac{3}{4}$$

$$\frac{6}{5}$$

$$\frac{1}{10}$$

Answer =

.....

	1
--	---

**Question 9**

Work out

9a.  $-12 + 15$

Answer =

.....

	1
--	---

9b.  $5 \times -3$

Answer =

.....

	1
--	---

9c.  $-24 - 16$

Answer =

.....

	1
--	---

9d.  $-90 \div -10$

Answer =

.....

	1
--	---

**Question 10**

10a. Simplify fully

$$\frac{12}{18}$$

Answer =

.....

	1
--	---

10b. Work out

$$\frac{7}{11} + \frac{2}{11}$$

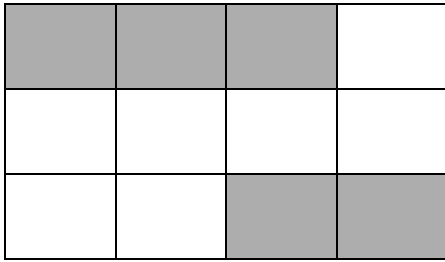
Answer =

.....

	1
--	---

### Question 11

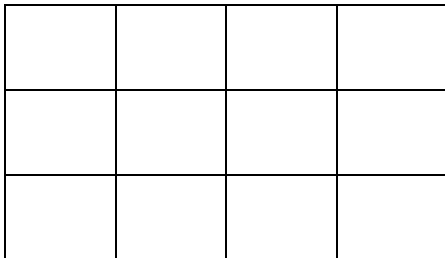
11a. What fraction of this shape is shaded?



Answer = .....

	1
--	---

11b. Shade  $\frac{2}{3}$  of the diagram below.



	1
--	---

11c. Mary says that  $\frac{1}{4}$  of the diagram has been shaded.

Explain why she is wrong.



.....  
 .....

	1
--	---

**Question 12**

Place the correct sign between the values.

$$0 \quad \square \quad -8$$

$$-4 \quad \square \quad -13$$

$$0.63 \quad \square \quad 0.7$$

	2
--	---

**Question 13**

Calculate the mean of these five values.

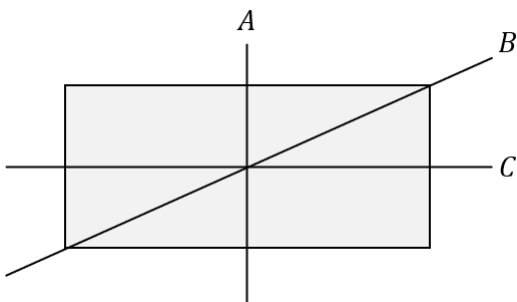
3, 7, 6, 14, 15

Answer = .....

	2
--	---

**Question 14**

Which of these lines are lines of symmetry?



Answer = .....

	1
--	---

**Question 15**

Calculate

$$53 \times 27$$

Answer =

.....

	2
--	---

**Question 16**

Expand

16a.  $9(h - 2)$

Answer =

.....

	1
--	---

16b.  $2(3b + 4)$

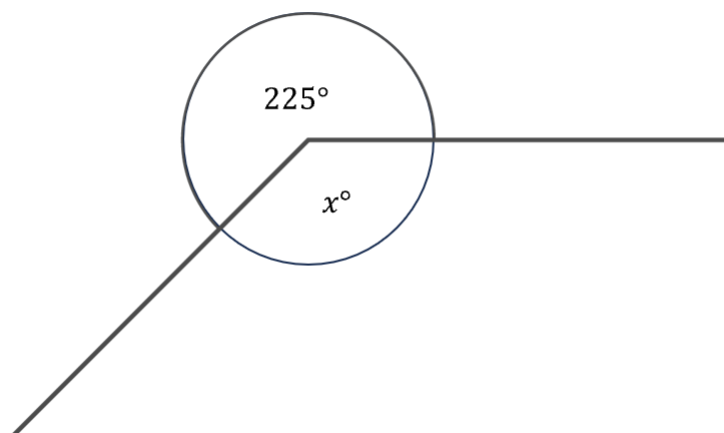
Answer =

.....

	1
--	---

**Question 17**

Work out the size of the missing angle,  $x$ .



Answer =

.....

	1
--	---

**Question 18**

Find  $\frac{2}{5}$  of 155

Answer =

.....

	2
--	---

**Question 19**

Work out

$$\sqrt{121} - 1^2$$

You **must** show your working.

Answer =

---

	2
--	---

**Question 20**

Work out

$$\frac{3}{7} + \frac{5}{3}$$

Give your answer as a mixed number.

Answer =

---

	3
--	---

**Question 21**

275 Year 7 and 8 pupils were asked what their favourite sport was.

Some information about the results is shown below.

Use this information to complete the two-way table.

- In Year 7, 23 pupils said their favourite sport was swimming.
- Twice as many Year 8 pupils said Tennis was their favourite sport, compared to Year 7.

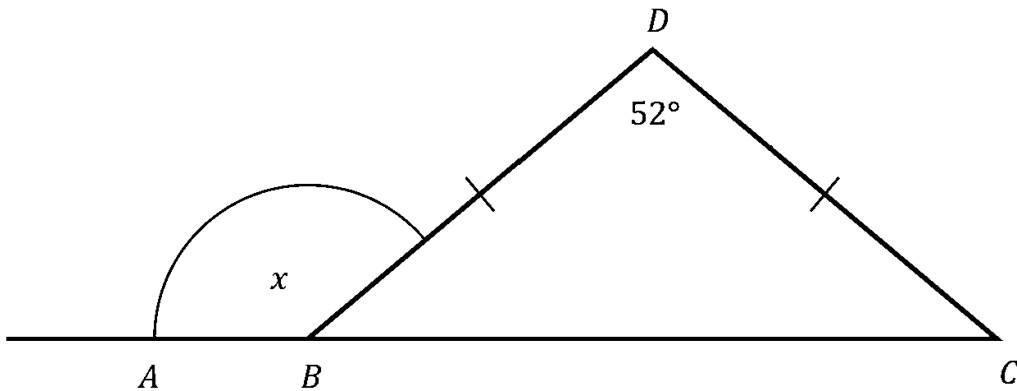
	Tennis	Football	Tag Rugby	Swimming	Total
Year 7	30		30		110
Year 8		50		18	
Total					275

**Question 22**

$ABC$  is a straight-line segment.

$BCD$  is an isosceles triangle.

Work out the size of angle  $x$ .



Answer =

.....

	3
--	---

**Question 23**

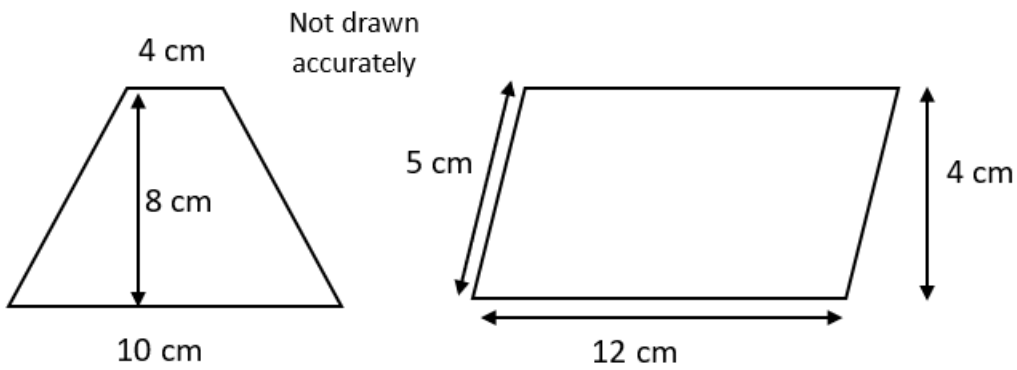
Insert a pair of brackets to make the calculation below correct.

$$8 + 4 \times 5 + 6 = 52$$

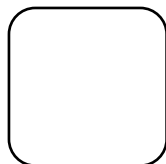
	1
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**Question 24**

Place the correct inequality between the statement below.



Area of the trapezium

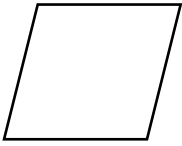


Area of the parallelogram

	3
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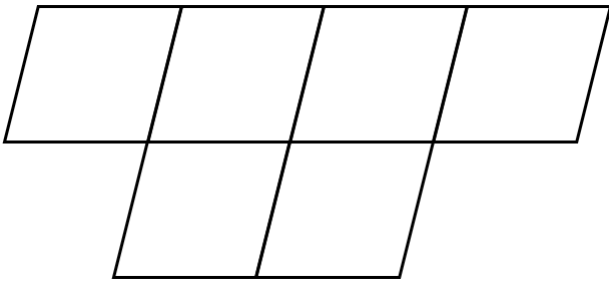
**Question 25**

The diagram shows a rhombus with a perimeter of  $12x$  cm.



Eight of these rhombi are fit together to make the shape below.

Find an expression for the perimeter of the shape.



Answer = ..... cm

	3
--	---

**Question 26**

Given that  $a = -5$ ,  $b = 3$  and  $c = -4$

Find the value of:

$$\frac{2a - 5b}{c^2 + 3b}$$

Answer = .....

	3
--	---

**Question 27**

Expand and simplify

$$3(5x + 8) - 4(x + 1)$$

Answer =

---

	3
--	---

END OF ASSESSMENT

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

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