

Year 7 Baseline Assessment

Mathematics Fluency

Time allowed: 50 minutes

Non-calculator

Student first name :

Student surname :

Teacher :

Teaching group :

Instructions

- Use black ink and draw diagrams in pencil.
- Fill in your name, teacher and teaching group in the boxes above.
- Answer all questions.
- Answer the questions in the spaces provided.
- Show clearly how you work out your answer.
- Do not use a calculator.

Information

- The test is 50 minutes long.
- The maximum mark for this paper is 60.
- The marks for the question are shown in brackets [].

Total marks :

Maximum mark :

60

1 Which one of these numbers has 3 tens?

342, 234, 3452, 243

Answer: [1 mark]

2 a) Complete the calculation to work out $243 + 415$

		2	4	3	
	+	4	1	5	

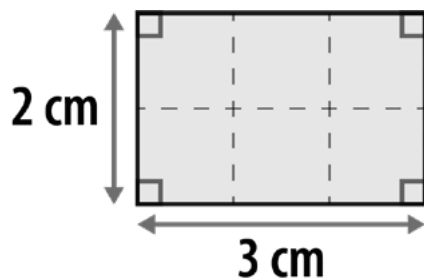
Answer: [1 mark]

b) Complete the calculation to work out $764 - 251$

		7	6	4	
	-	2	5	1	

Answer: [1 mark]

3 What is the **area** of this rectangle?



Answer: cm² [1 mark]

4

Shade $\frac{3}{5}$ of the shape below.



[1 mark]

5

a) What is 820 rounded to the nearest 100?

Answer: [1 mark]

b) What is 13.5 rounded to the nearest whole number?

Answer: [1 mark]

6

a) What number is one hundred times bigger than 5.4?

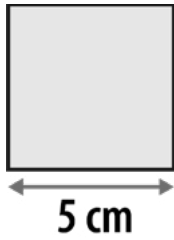
Answer: [1 mark]

b) What number fills the gap in the calculation below?

$$\boxed{} \div 10 = 0.7$$

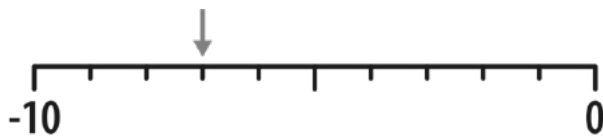
[1 mark]

7 What is the **area** of this square?



Answer: cm² [2 marks]

8 What number is the arrow pointing to on this scale?



Answer: [1 mark]

9 Rounding to the nearest ten, which two numbers round to 30?

38, 29, 23, 31, 36

Answer: and [2 marks]

10 Arrange these numbers in ascending order (smallest to largest):

0.67, 0.7, 0.09, 0.75

Answer: [1 mark]

11 Work out $78 \div 6$

$$6 \overline{) 78}$$

Answer: [1 mark]

12 Use the prices below to work out the total cost of **two** blue pens and **one** ruler.
Give your answer in pounds.

Ruler	35p
Pencil	20p
Blue pen	40p
Green pen	30p
Eraser	15p

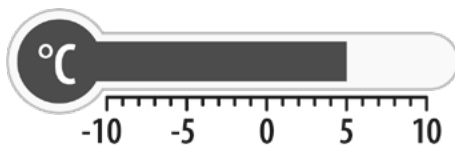
Answer: £ [2 marks]

13 Circle all of the prime numbers in the list below.

16, 13, 20, 19, 15

[1 mark]

14 Find the temperature that is 7°C lower than 5°C .



Answer: $^{\circ}\text{C}$ [1 mark]

15

a) Work out $8.2 + 43.5$

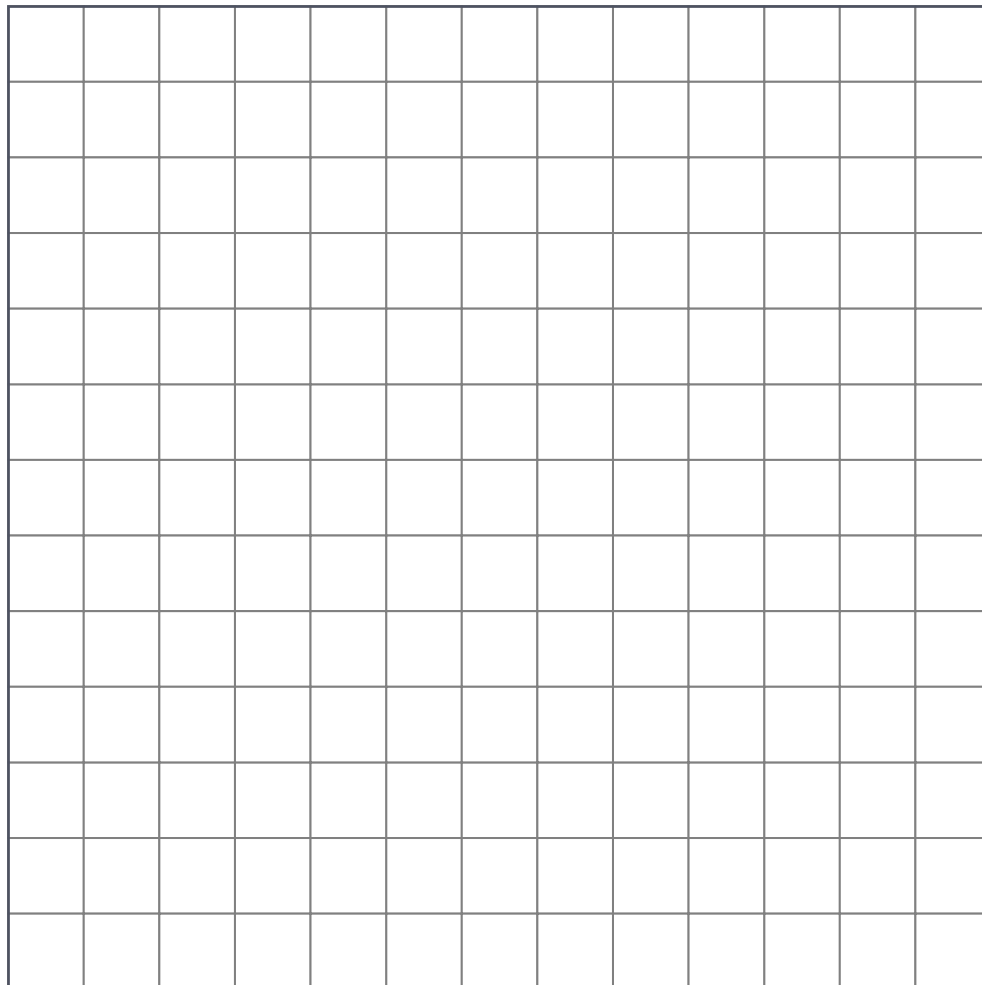
Answer: [1 mark]

b) Subtract 0.6 from 2.45

Answer: [1 mark]

16

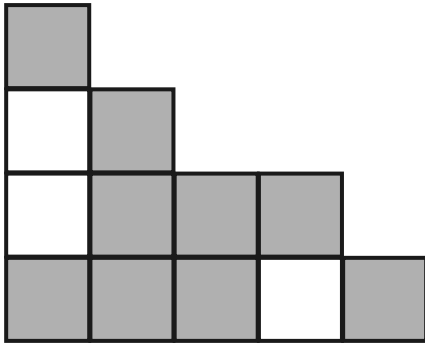
Draw a rectangle with a **perimeter** of 12 cm on the centimetre square grid below.



1 cm

[1 mark]

- 17 What fraction of the shape below is shaded?
Give your answer in its simplest form.



Answer: [2 marks]

- 18 Write $<$ or $>$ in the empty boxes below to make the statements correct.

4 -6 -5 -7

[2 marks]

- 19 a) Multiply 248 by 5

Answer: [2 marks]

- b) Divide 343 by 7

Answer: [2 marks]

20

Which of these numbers is closest to 1?

0.9306, 0.9304, 0.9008, 0.93, 0.9206

Answer: [1 mark]

21

Write these fractions in ascending order (smallest to largest):

$\frac{4}{5}$, $\frac{1}{5}$, $\frac{7}{10}$

Answer: [2 marks]

22

Find **all** the factors of 28

Answer: [2 marks]

23 On a farm there are 6 beech trees and 19 walnut trees.
What fraction of the total number of trees on the farm are beech trees?

Answer: [1 mark]

24 A group of 4 friends has a bag of 23 sweets.
They divide the sweets equally between them.

a) How many sweets does each friend receive?

Answer: [1 mark]

b) How many sweets are left over?

Answer: [1 mark]

25 What is 980 rounded to the nearest 100?

Answer: [1 mark]

26 a) Fill in the gap below to complete the calculation.

$$\begin{array}{r} 5 4 \square \\ + 3 1 7 \\ \hline 8 6 3 \\ \hline 1 \end{array}$$

[1 mark]

b) Fill in the gap below to complete the calculation.

$$\begin{array}{r} 9 4 6 \\ - 6 \square 5 \\ \hline 2 6 1 \\ \hline \end{array}$$

[1 mark]

27 Write down the number **four million and fifty** in figures.

Answer: [1 mark]

28

Find two primes which add to make 32.

What is the difference of these two primes?

Answer: [2 marks]

29

Complete this equality to find the three equivalent fractions.

$$\frac{1}{5} = \frac{3}{\square} = \frac{\square}{20}$$

[2 marks]

30

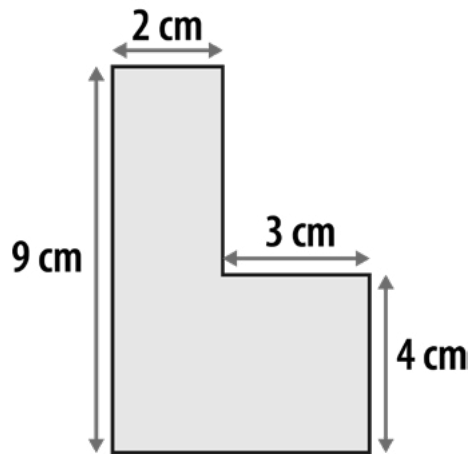
Write down these numbers in ascending order:

-3.44, -3.5, 3.09, 0.03, -3.441

Answer: [1 mark]

31

Work out the **perimeter** of this shape.



Answer: cm [3 marks]

32

The number of people in a stadium is 26,000 when rounded to the nearest 1000 people.

What is the minimum number of people that are in the stadium?

Answer: [1 mark]

33

Work out $200 - 0.001$

Answer: [1 mark]

A plane ticket to Dublin costs £193

This table shows the number of plane tickets to Dublin sold each day last week.

Day	Number of tickets sold
Monday	18
Tuesday	21
Wednesday	48
Thursday	58
Friday	67
Saturday	55
Sunday	32

- a) How much money was spent on tickets to Dublin on Wednesday?

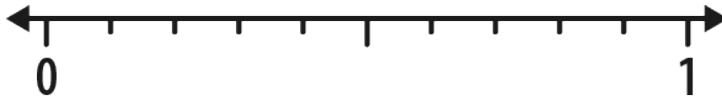
Answer: £ [2 marks]

- b) Write down how much **more** was spent on tickets on Thursday.

Answer: £ [1 mark]

35

a) Mark $\frac{2}{5}$ on the number line.



[1 mark]

b) How much larger is $\frac{7}{10}$ than $\frac{2}{5}$? Give your answer in its simplest form.

Answer: [1 mark]

36

Given that $46 \times 31 = 1426$, work out 4.6×3.1

Answer: [1 mark]

37

888 will divide exactly by 37

What is the remainder when 886 is divided by 37?

Answer: [1 mark]

End of assessment

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