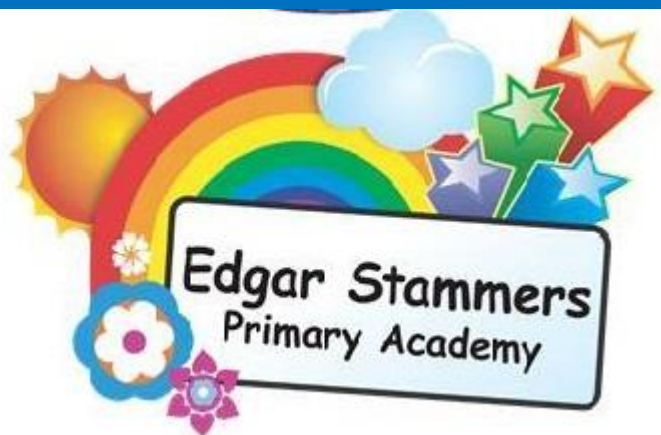


EDGAR STAMMERS PRIMARY ACADEMY



# Y6 MATHS WORKSHOP

11<sup>th</sup> February 2019

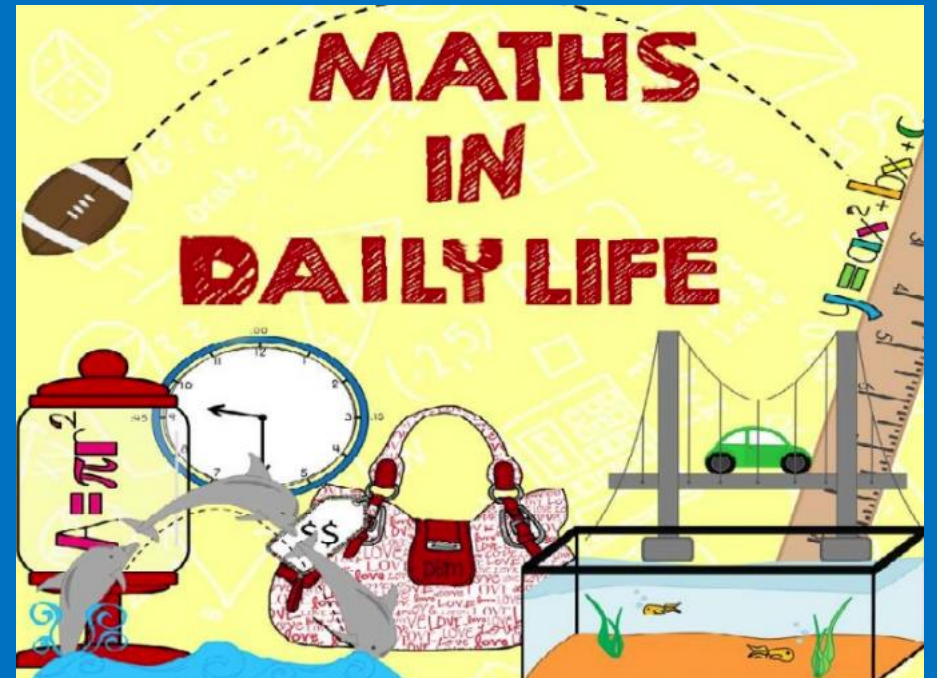


# AIMS

- To inform about maths expectations and provide hints and tips for how you can help your child at home.
- To explore the content and expectations of formative and statutory assessments.
- To model the formal written methods.

# It's not all about SATS.....

- Telling the time
- Reading timetables
- Finances
- Recipes
- Sale shopping



# ARITHMETIC

- 30 minutes to answer 36 questions.
- The key to the Arithmetic paper is pupils identifying questions that could be carried out mentally (or with jottings) vs those that need a fuller written method.
- If you try and work out every question with a written method, you will run out of time to complete the paper.
- The content will draw on all learning from Year 3 to Year 6.

# 4 OPERATIONS (ADD, SUBTRACT, MULTIPLY, DIVIDE)

- Key is deciding if the question can be answered mentally (with jottings), or if a formal method needs to be used.
- Place value – lining up the decimal point.
- Adding place holders.
- Writing key facts
- Accuracy!

## ADDITION (QUESTIONS 1, 3, 5, 8, 20)

1

$$979 + 100 =$$

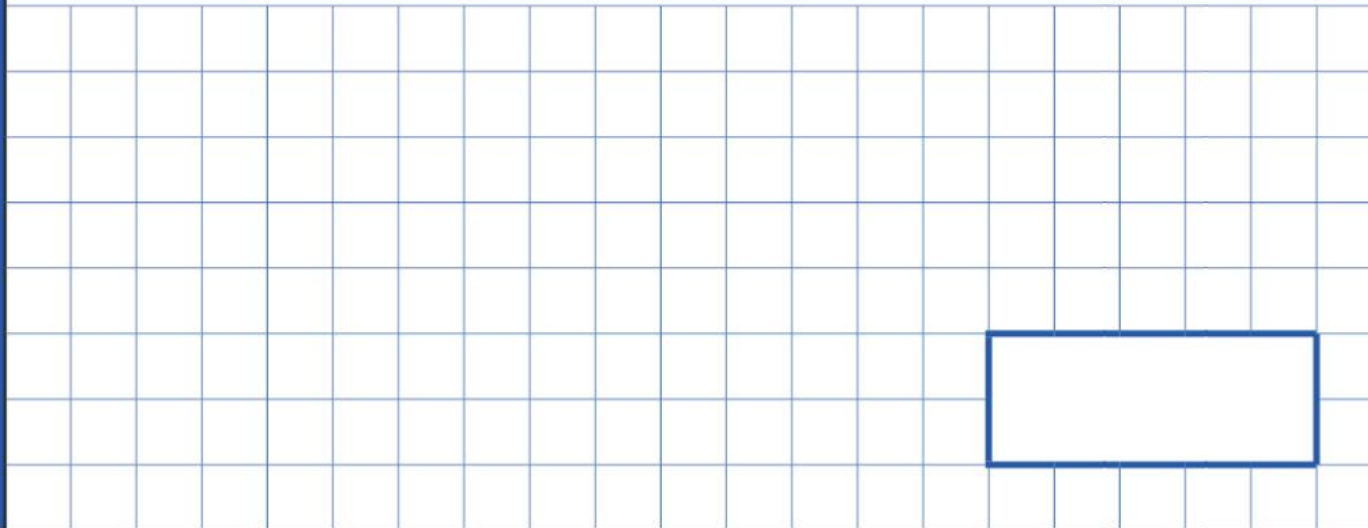
--

11

1 mark

3

$$6.1 + 0.3 =$$



A grid of 20 columns and 10 rows for working space. A rectangular box is drawn in the bottom right corner of the grid, spanning 4 columns and 2 rows.

☐

1 mark

5

$$1,034 + 586 =$$

--	--

11

1 mark

8

$$2.5 + 0.05 =$$

☐

1 mark

20

$$5,756 + 8,643 =$$

1 mark

1 mark

# SUBTRACTION (QUESTIONS 7, 14, 22, 24, 28)

7

$$472 - 9 =$$

☐

1 mark

14

$$50,000 - 500 =$$

☐

1 mark

22

$$12 - 6.01 =$$

☐

1 mark

12 of 20

24

$$15.4 - 8.88 =$$

☐

1 mark

28

$$234,897 - 45,996 =$$



**1 mark**

  
1 mark

# MULTIPLICATION (QUESTIONS 2, 4, 9, 12, 15, 18, 23, 29)

2

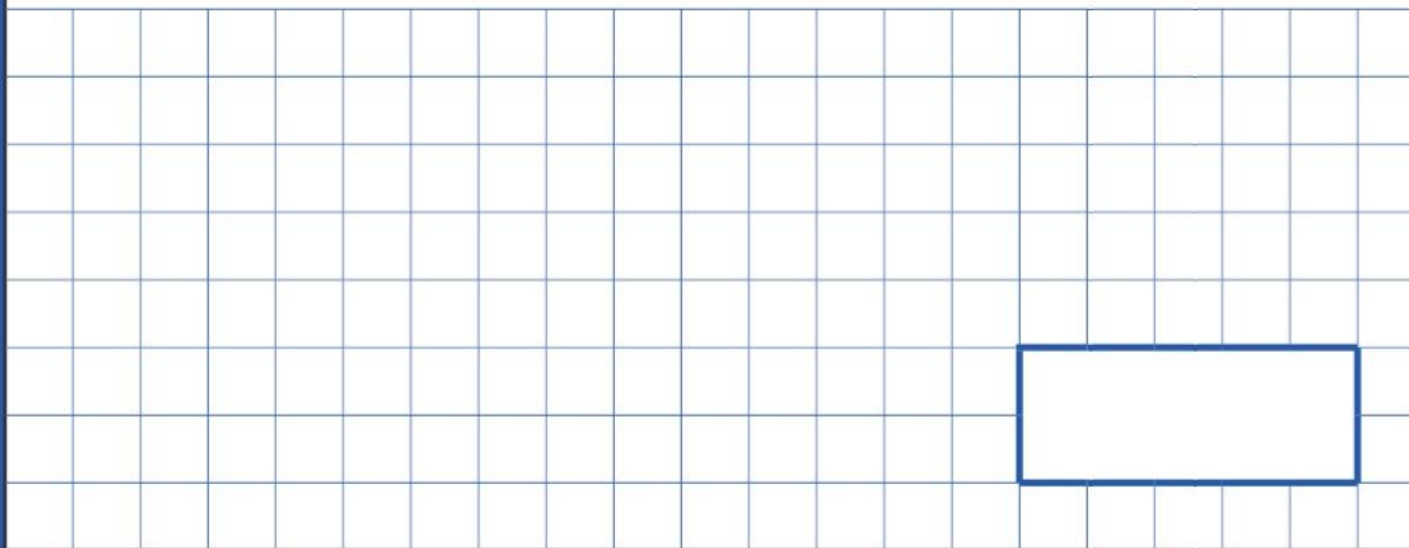
$$123 \times 2 =$$

☐

1 mark

4

$$24 \times 3 =$$



A large grid of 20 columns and 10 rows is provided for working space. A smaller rectangular box, 5 columns wide and 3 rows high, is located at the bottom right of the grid, intended for the final answer.



A small square box, 2 columns wide and 2 rows high, is located in the bottom right corner of the page, intended for marking the answer.

1 mark

9

$$5 \times 4 \times 7 =$$

☐

1 mark

12

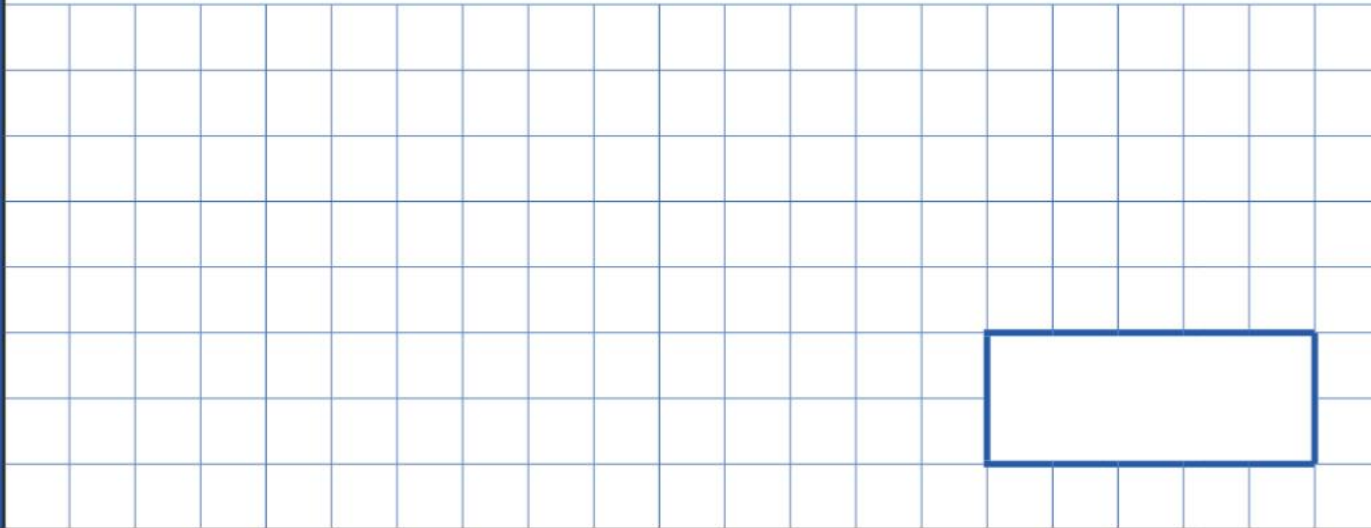
$$1.28 \times 100 =$$

☐

1 mark

15

$$100 \times 100 =$$



A large grid of 20 columns and 10 rows, intended for showing the calculation process. A smaller rectangular box is located in the bottom right corner of the grid, spanning 5 columns and 3 rows.



A small square box, likely for marking the answer.

1 mark

18

$$1.52 \times 6 =$$

☐

1 mark

23

x

5 4  
2 3

Show  
your  
method

2 marks

14 of 20

29

×

6 7 8  
5 4

Show  
your  
method

2 marks

# DIVISION (QUESTIONS 6, 11, 16, 21, 25, 31)

6

$$48 \div 6 =$$

1 mark

11

$630 \div 9 =$

The image shows a grid of 20 columns and 10 rows of squares. A blue rectangular box is drawn in the bottom right corner, spanning 10 columns and 2 rows of the grid.

--

1 mark

1 mark

9 of 20

16

$$1,440 \div 12 =$$

--

1 mark

**21**

$$7,505 \div 5 =$$

☐

1 mark

25

1 3 3 0 1 6

Show  
your  
method

2 marks

16 of 20

34

3 7 | 2 3 3 1

Show  
your  
method

2 marks

# SQUARE NUMBERS (QUESTION 13)

$1^2$	1	×	1	=	1
$2^2$	2	×	2	=	4
$3^2$	3	×	3	=	9
$4^2$	4	×	4	=	16
$5^2$	5	×	5	=	25
$6^2$	6	×	6	=	36

$7^2$	7	×	7	=	49
$8^2$	8	×	8	=	64
$9^2$	9	×	9	=	81
$10^2$	10	×	10	=	100
$11^2$	11	×	11	=	121
$12^2$	12	×	12	=	144

The product of a number multiplied by itself.

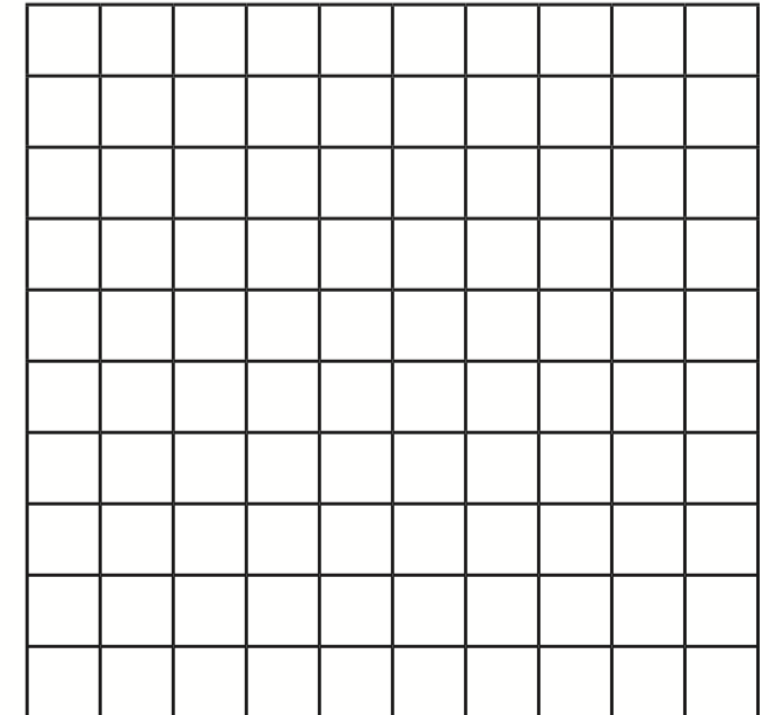
**e.g.  $10 \times 10 = 100$**

which can be shown as:

$$10^2 = 100$$

$$10 \text{ squared} = 100$$

$$10 \times 10 = 100$$



# CUBE NUMBERS

$1^3$	$1 \times 1 \times 1 =$	1
$2^3$	$2 \times 2 \times 2 =$	8
$3^3$	$3 \times 3 \times 3 =$	27
$4^3$	$4 \times 4 \times 4 =$	64
$5^3$	$5 \times 5 \times 5 =$	125

$6^3$	$6 \times 6 \times 6 =$	216
$7^3$	$7 \times 7 \times 7 =$	343
$8^3$	$8 \times 8 \times 8 =$	512
$9^3$	$9 \times 9 \times 9 =$	729
$10^3$	$10 \times 10 \times 10 =$	1000

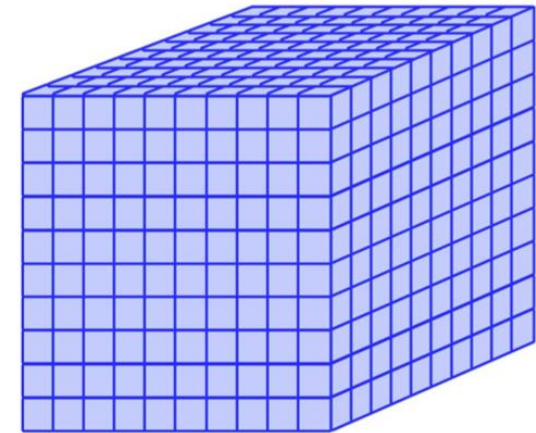
Formed by  
multiplying a digit by  
itself 3 times.

e.g.  $10 \times 10 \times 10 = 1000$   
which can be shown as:

$$10^3 = 1000$$

$$10 \text{ cubed} = 1000$$

10x10x10 cube



8 of 20

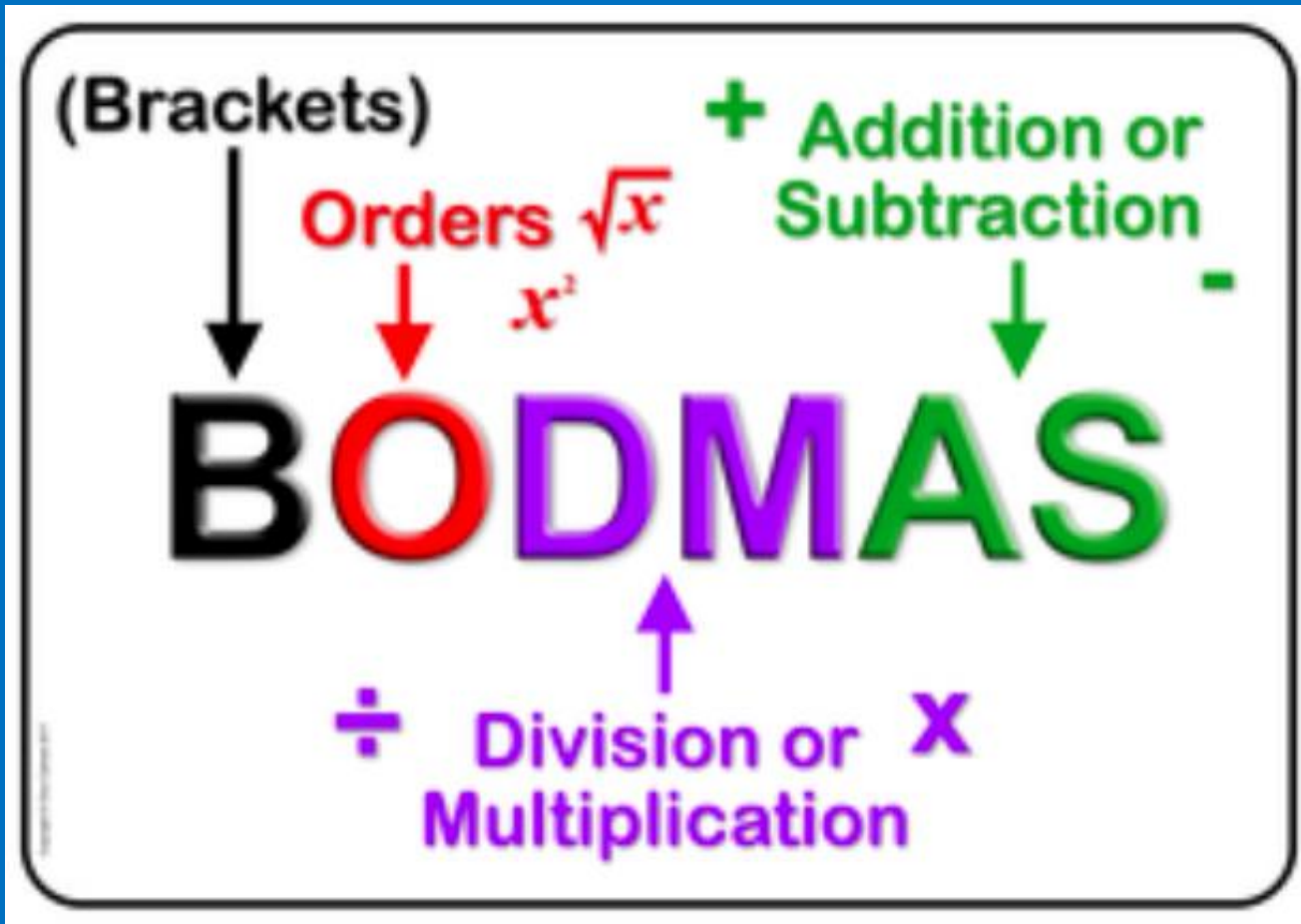
13

$$4^2 =$$

☐

1 mark

# BODMAS (QUESTION 31)



Always work left to right!

15 of 20

31

$$20 - 4 \times 2 =$$

☐

1 mark

# PERCENTAGES (QUESTIONS 17, 21)

Children need to know  
how to find these  
percentages.

If they can find these,  
they can find all  
percentages up to  
100%

50%

25%

75%

10%

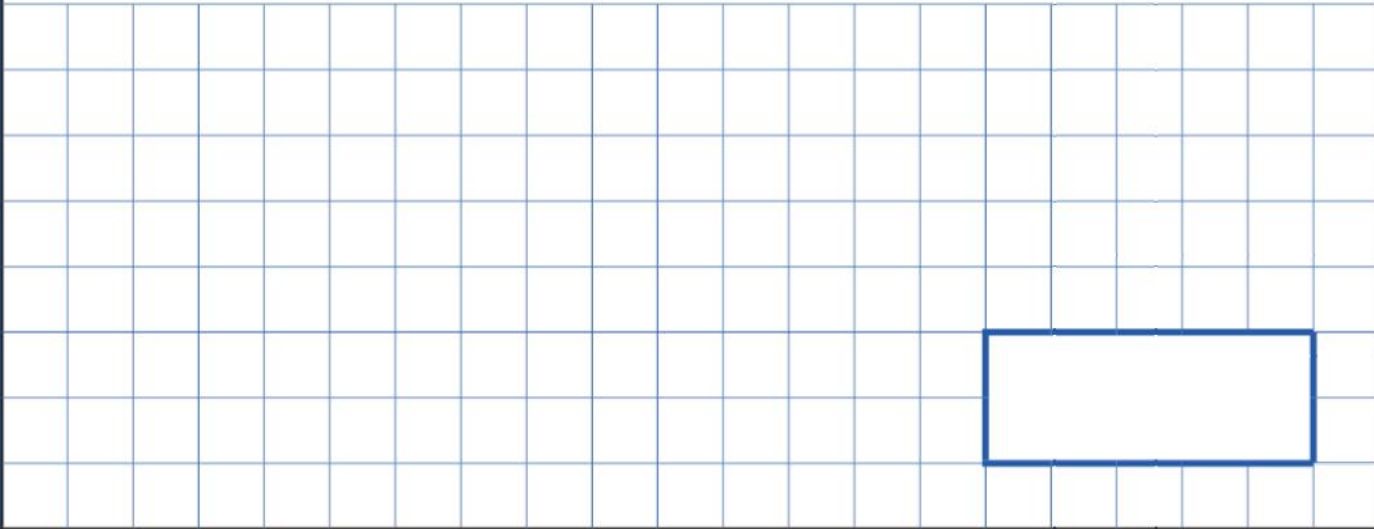
5%

1%

How do we  
find these  
percentages?

17

20% of 1,500 =



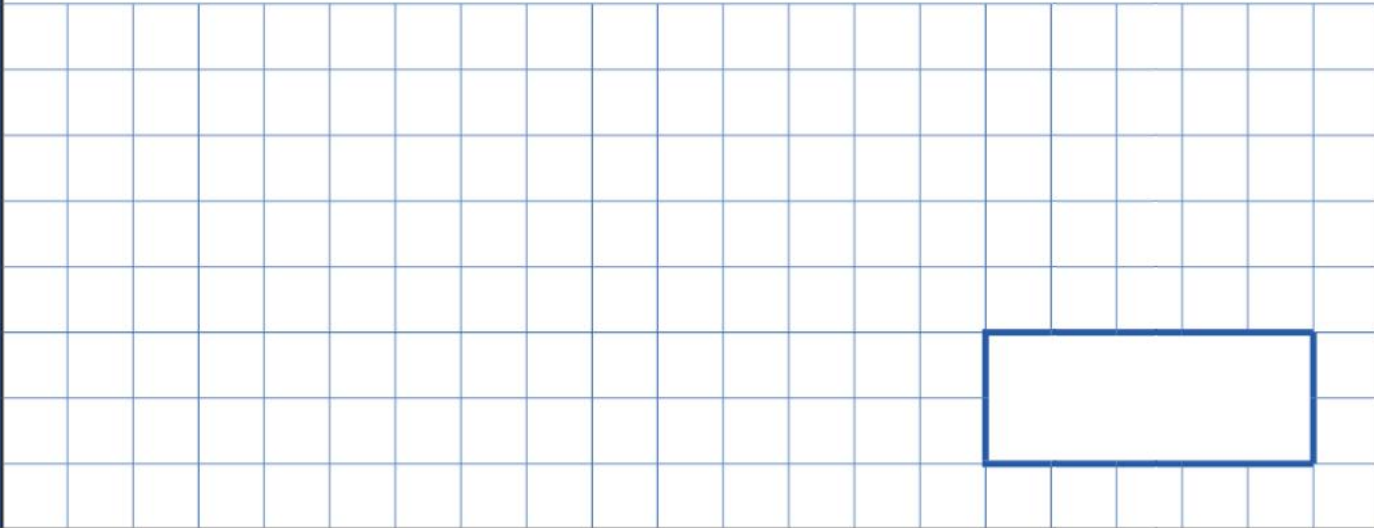
--

1 mark

1 mark

27

95% of 240 =



A large grid of 20 columns and 10 rows of squares, used for visual calculation. A rectangular box is drawn in the bottom right corner, spanning 5 columns and 3 rows.

1 mark

1 mark

# FRACTIONS (QUESTIONS 10, 19, 26, 30, 32, 33, 35, 36)

- Fractions make up a large percentage of the test.

## Top Tips

- If there is a whole number, it always goes over a denominator of 1

## FRACTIONS (QUESTIONS 10, 19, 26, 30, 32, 33, 35, 36)

10

$\frac{4}{5} - \frac{1}{5} =$

1 mark

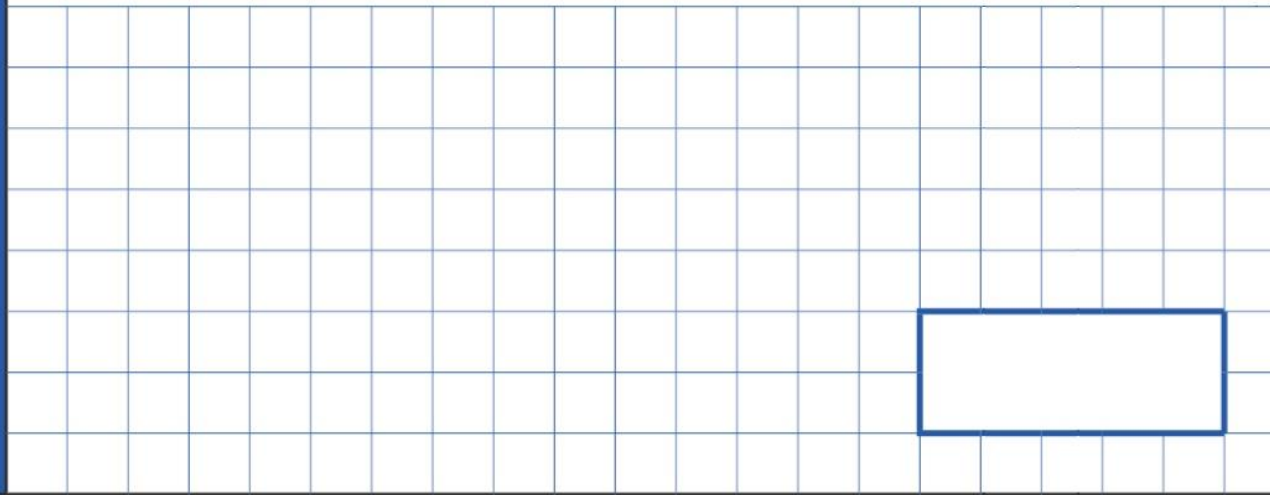
If the denominator is the same,  
just add/subtract the  
numerators

[illegible]

13 of 20

26

$$\frac{1}{4} \times \frac{1}{8} =$$

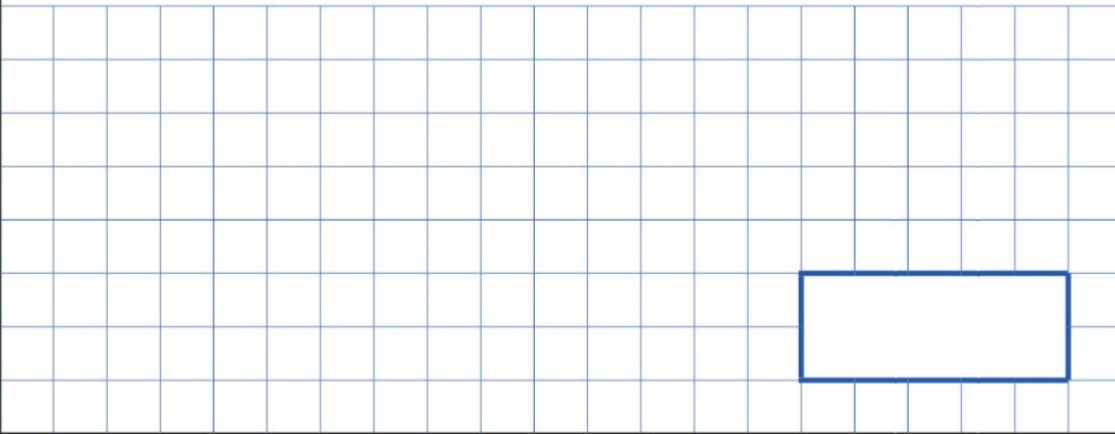


1 mark

The easiest of all fractions. Multiply the numerators, multiply the denominators!

30

$$17 \times 1\frac{1}{2} =$$



1 mark

- 1) Whole number over a denominator of 1.
- 2) Convert the mixed number to an improper fraction.
- 3) Multiply the numerators.
- 4) Multiply the denominators.

32

$$\frac{2}{5} \div 2 =$$

☐

1 mark

- 1) Whole numbers over a denominator of 1
- 2) Flip the second fraction.

- 3) Multiply the numerators.
- 4) Multiply the denominators.

36

$$\frac{3}{4} \div 2 =$$

☐

1 mark

35

$$\frac{3}{4} + \frac{7}{8} =$$

☐

1 mark

- 1) Find a common denominator.
- 2) Make the fractions equivalent over the same denominator.
- 3) Add the numerators.
- 4) Leave the denominator as it is.

33

$$1\frac{1}{5} - \frac{1}{4} =$$

--

1 mark



# THANK YOU FOR ATTENDING



Please fill in an evaluation form as we would welcome the feedback.  
Any suggestions, or requests for extra support, will be listened to.

Please take the packs home with you and see if you can answer any more with your child. We sat Maths papers last week for assessment so we can target support. Once they are marked, they too can be sent home so you can see how they are doing.