

MATHEMATICS HOMEWORK BOOKLET

Benjamin Britten Academy of Music and Mathematics

Year 7 Book B
AUTUMN TERM



NAME:



Mathematics homework

Contents

How does it work?

- One homework will be set a week
- The due date for each homework will be written on this page
 - Some homework will need completing on this booklet, others on the internet
- If you need help logging onto mathswatch, you need to see your class teacher
 - If you need help with the homework task, you must peak to your teacher before the due date
- The school runs a homework club. Speak to your teacher to find out which day.
- If you lose your booklet a copy can be found on your class google classroom or on the schools website.
 - Your teacher will give you information on where to find the answers.

WEEK	Numeracy	Due
1	NUMERACY	
2	ODD AND EVEN	
3	RESEARCH TASK	
4	MATHSWATCH	
5	SEQUENCES	
6	SUBSTITUTION	
7	MATHSWATCH	
8	RESEARCH TASK	
9	NUMERACY	
10	MATHSWATCH	
11	PERIMETER	
12	NUMERACY	
13	ANALOGUE CLOCK	
14	MATHSWATCH	

Completing your homework

All homework tasks need to be completed in this booklet or on a specific website.

There are also **answers** for all booklet tasks. Your teacher will either upload these to your class google classroom and expect you to mark it in class. Speak to your teacher if you are unsure.

Remember - if you need help, you must speak to your teacher **before** the due date.

Login details

Below are the log in instructions you will need in order to access and complete some of the homework tasks in this booklet.

If you have any issues logging in, you **must** speak to your teacher as soon as possible.

To log in, all students should use the **Single Sign-on service** through either Google or Microsoft. Click either the Google or Microsoft buttons (see below) and then enter your school email address and school computer login password.

e.g. 25bloggsj@benjaminbritten.school and password which could be: BlueCat123 (example)



If you see the logo above next to a task, you can type the clip number into Mathswatch for extra help!

Watch the video and make notes, then try the homework task again. If you still need help, then speak to your maths teacher at school.



Homework 1: Numeracy

MENTAL STRATEGIES -
do these in your head

TIMESTABLES -
do these in your head

Literacy challenge: Missing vowels!

Below are 3 keywords in maths, but the vowels are missing. Can you fill the blanks?

_ DD _ T _ _ N

M _ LT _ PL _ C _ T _ _ N

_ R _ THM _ T _ C

×	7	3	11	6	2	4	8	9	5	12	10
9											
4											
2											
8											
10											
3											
7											
5											
12											
11											
6											

written methods: addition & subtraction

examples

$$\begin{array}{r} 50 \text{ Thousand} + 8,654 \\ = 50 \text{ } 000 \\ \quad \underline{8 \ 654} \quad + \\ \underline{58 \ 654} \end{array}$$

$$\begin{array}{r} 3421 - 304 \\ = 34 \overset{1}{\cancel{2}} 1 \\ \quad \underline{304} \quad - \\ \underline{3117} \end{array}$$

Write the larger number on top
Line up the columns from the right
Borrow from the left if the digit
on top is smaller

Complete out these column additions

$$\begin{array}{llll} 1) & \begin{array}{r} 2607 \\ + 1328 \\ \hline \end{array} & 2) & \begin{array}{r} 5286 \\ + 505 \\ \hline \end{array} & 3) & \begin{array}{r} 2305 \\ + 3523 \\ \hline \end{array} & 4) & \begin{array}{r} 6817 \\ + 1320 \\ \hline \end{array} \end{array}$$

$$\begin{array}{llll} 5) & \begin{array}{r} 2582 \\ + 2173 \\ \hline \end{array} & 6) & \begin{array}{r} 4438 \\ + 3121 \\ \hline \end{array} & 7) & \begin{array}{r} 7653 \\ + 273 \\ \hline \end{array} & 8) & \begin{array}{r} 1914 \\ + 359 \\ \hline \end{array} \end{array}$$

In each box, find pairs of numbers that **sum to 100**.
Circle the number that is left over.

A

25	70	40
45	30	75
60	35	55

B

85	65	55
45	95	15
5	25	35

C

88	28	22
82	78	72
18	92	12

D

73	17	27
13	84	37
16	83	87

E

11	22	33
44	67	78
87	89	56

F

49	53	55
57	41	51
43	59	47

Which of the following is the correct calculation of $3847 - 554$?

a)
$$\begin{array}{r} 3847 \\ 554 \\ \hline 2307 \end{array}$$

b)
$$\begin{array}{r} 3847 \\ 554 \\ \hline 3313 \end{array}$$

c)
$$\begin{array}{r} 3847 \\ 554 \\ \hline -2307 \end{array}$$

d)
$$\begin{array}{r} 3847 \\ 554 \\ \hline 3293 \end{array}$$

subtraction missing digit puzzles

$$\begin{array}{r} 1822 \\ 2\Box4- \\ \hline \Box\Box1\Box \end{array}$$

$$\begin{array}{r} 412\Box \\ \Box\Box2- \\ \hline \Box427 \end{array}$$

$$\begin{array}{r} 6\Box4\Box \\ 222- \\ \hline 63\Box8 \end{array}$$

$$\begin{array}{r} 2\Box3\Box \\ 256- \\ \hline 20\Box9 \end{array}$$

$$\begin{array}{r} 1042 \\ 2\Box5- \\ \hline \Box9\Box \end{array}$$

$$\begin{array}{r} 365\Box \\ \Box\Box7- \\ \hline \Box933 \end{array}$$

$$\begin{array}{r} 5037 \\ 2\Box4- \\ \hline \Box\Box9\Box \end{array}$$

$$\begin{array}{r} 4\Box1\Box \\ \Box31- \\ \hline 39\Box8 \end{array}$$



Homework 2: Odd and Even numbers

List the first 10 even numbers: _____

List the first 10 odd numbers: _____

If even numbers always end with a 0,2,4,6,8 what digits do odd numbers always end in _____

Circle all the even numbers in the grid below.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Problem solving!

Apply your core skills to the challenge questions below...

CHALLENGE 1

- I am greater than 200.
- I am even.
- I am a multiple of 5.

Who am I? _____

A 526	B 713	C 92	D 107
E 274	F 810	G 625	H 321

CHALLENGE 2

- I am an odd number.
- I am less than 800.
- The total of all my digits is also odd.
- I am not a multiple of 5.

Who am I? _____

A 526	B 713	C 92	D 107
E 274	F 810	G 625	H 321

CHALLENGE 1

- I am less than 900.
- I am a 3-digit number.
- I am odd.
- The total of all my digits is also odd.

Who am I? _____

A 509	B 280	C 465	D 258
E 87	F 833	G 912	H 314

CHALLENGE 2

- I am greater than 250.
- My hundreds digit is less than 8.
- I am an even number.
- My smallest digit is my tens digit.

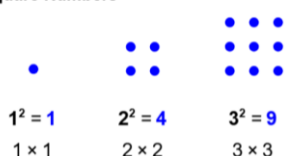
Who am I? _____

A 509	B 280	C 465	D 258
E 87	F 833	G 912	H 314

learn by heart

Prime Number: a positive integer with exactly 2 factors, 1 and itself

Square Numbers



- List the first 10 prime numbers _____
- List the first 10 square numbers _____

Problem solving!

Apply your core skills to the challenge questions below...

Shown below are 4 number cards.



Using the number cards, make

- (a) the smallest possible 2 digit number.

.....
(1)

- (b) the largest possible 4 digit **odd** number.

.....
(1)

Write down an odd prime number.

.....
(1)

Write down an even square number.

.....
(1)

Andrea adds two odd numbers.

Is the correct answer, odd, even or either?

☐

odd

☐

even

☐

either

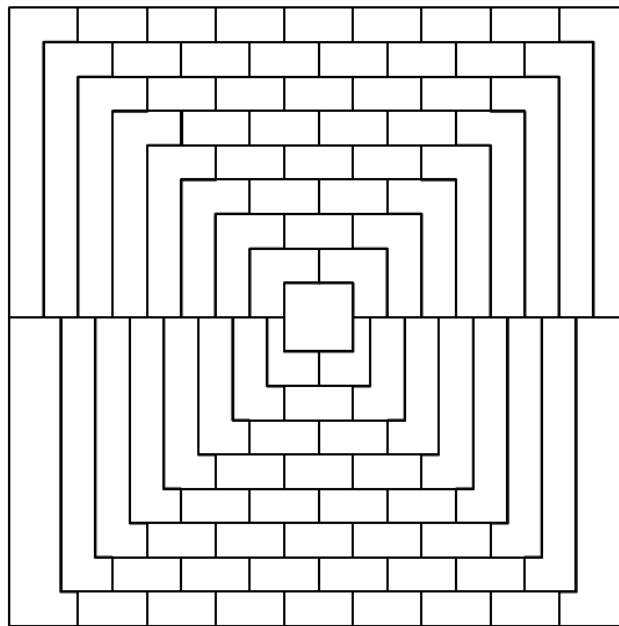


Homework 3: Research Task

Four colour Theorem

Part A

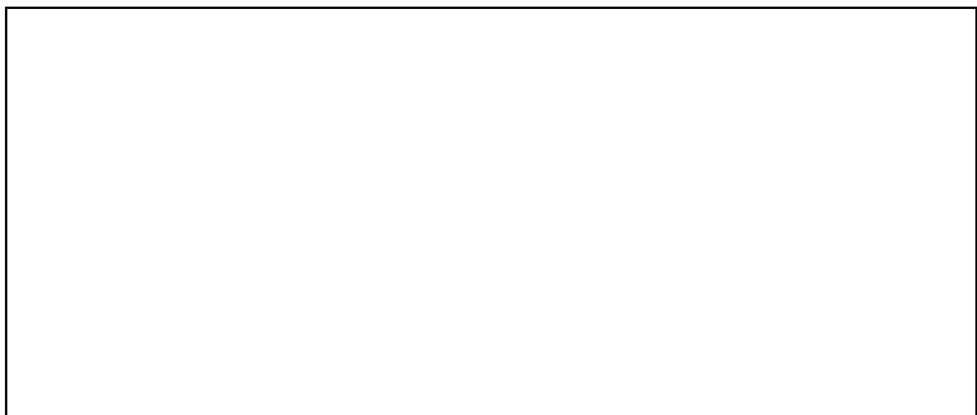
Colour in the pattern so that no areas which touch have the same colour. Try to use the least number of different colours possible.



What is the least number of different colours that are needed?

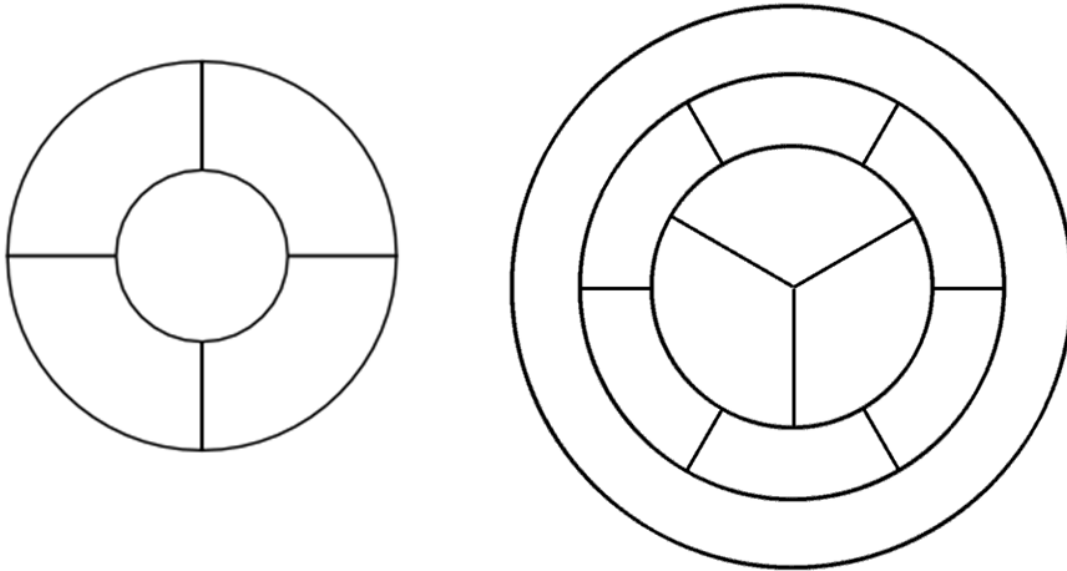
Part B

Now make your own pattern using the same rule (you can't have the same colours next to each other). Try to make a pattern which needs the greatest number of different colours.



What is the greatest number of different colours that are needed?

How many colours do you need to colour the two pictures below so that no two touching parts are the same colour? Use your own colours to test it out. Try to use the minimum number of colours possible.



Thanks to the Four Colour Theorem, we know that any picture of this kind only requires four different colours (to have no touching parts be the same colour).

RESEARCH: Use the internet or books to answer the following questions.

Q1 a) What is cartography?

b) How does the Four Colour Theorem link to cartography?

Q2 Why do some people believe that the Four Colour Theorem has not been proven properly?

Q3 Who famously thought he had proved the Four Colour Theorem but found out ten years later that he had made a mistake?



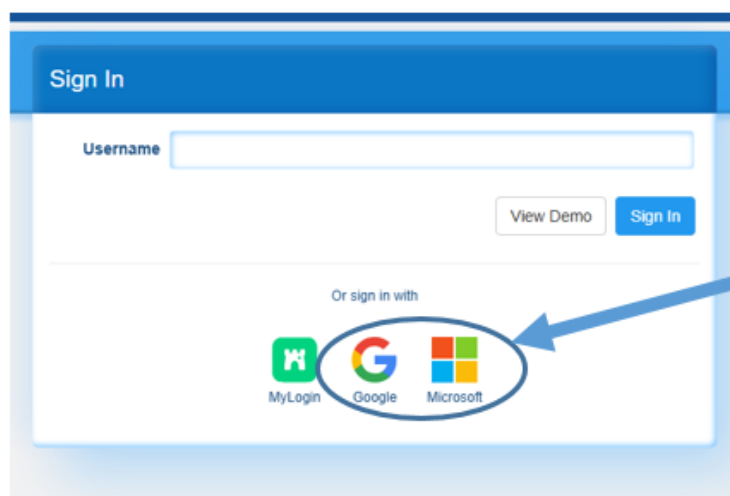
Homework 4:

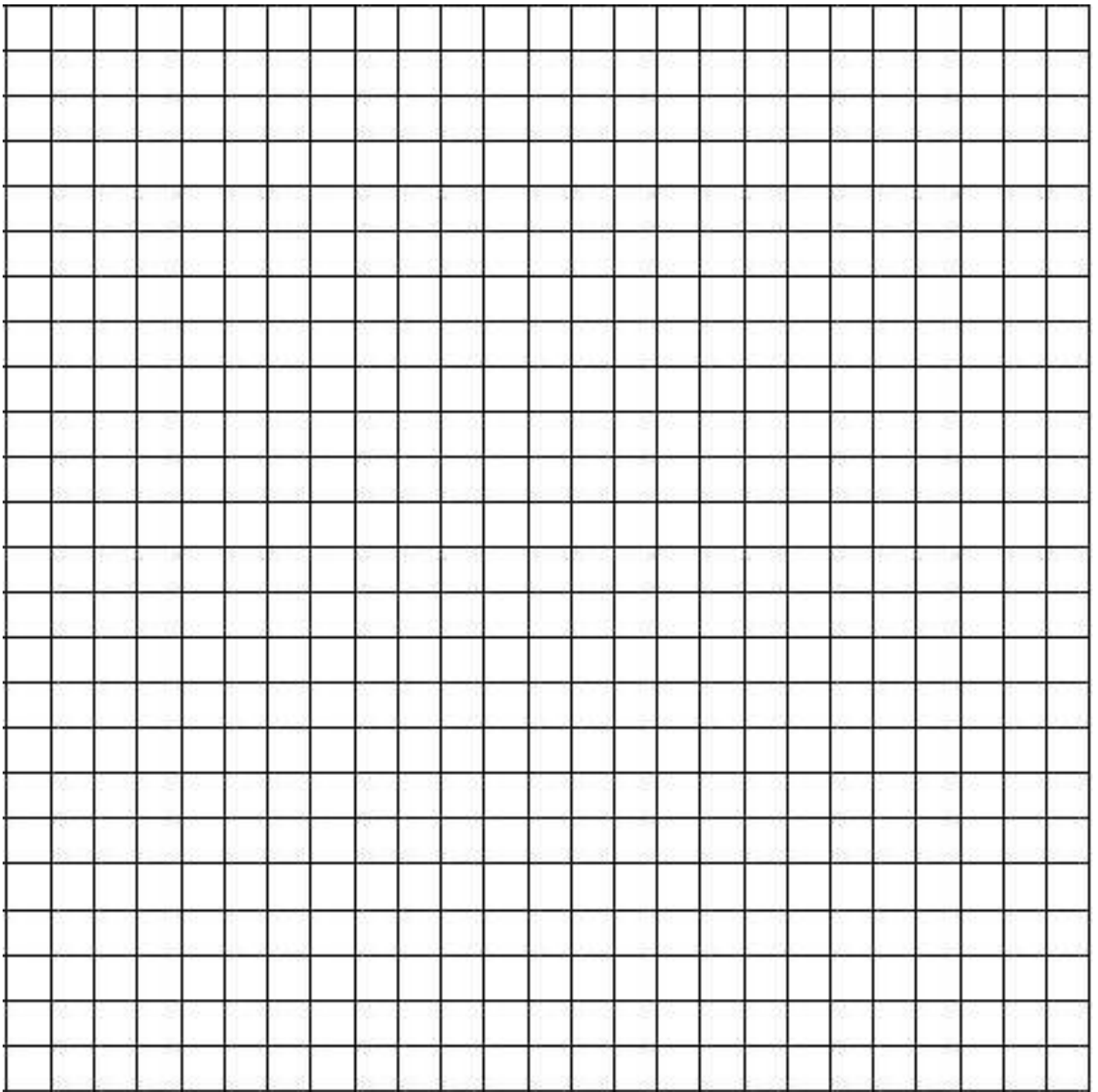


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Don't forget about your MEAT SHEETS

The purpose of your MEAT sheet is to identify both strengths and areas for development for you to work on independently using MathsWatch.

Area 1: Number and Place Value	Area 2: Addition and Subtraction	Area 3: Multiplication and Division
Area 1: Number and Place Value 1. Counting forwards and backwards from any number up to 100. 2. Reading and writing numbers from 10 to 100. 3. Understanding the relationship between tens and ones. 4. Ordering and comparing numbers. 5. Rounding numbers to the nearest 10. 6. Understanding the place value of digits in a number. 7. Adding and subtracting within 100. 8. Understanding the relationship between addition and subtraction. 9. Understanding the relationship between multiplication and division. 10. Understanding the relationship between fractions and decimals.	Area 2: Addition and Subtraction 1. Adding and subtracting within 100. 2. Understanding the relationship between addition and subtraction. 3. Understanding the relationship between multiplication and division. 4. Understanding the relationship between fractions and decimals. 5. Understanding the relationship between percentages and fractions. 6. Understanding the relationship between percentages and decimals. 7. Understanding the relationship between percentages and fractions. 8. Understanding the relationship between percentages and decimals. 9. Understanding the relationship between percentages and fractions. 10. Understanding the relationship between percentages and decimals.	Area 3: Multiplication and Division 1. Multiplying and dividing within 100. 2. Understanding the relationship between multiplication and division. 3. Understanding the relationship between fractions and decimals. 4. Understanding the relationship between percentages and fractions. 5. Understanding the relationship between percentages and decimals. 6. Understanding the relationship between percentages and fractions. 7. Understanding the relationship between percentages and decimals. 8. Understanding the relationship between percentages and fractions. 9. Understanding the relationship between percentages and decimals. 10. Understanding the relationship between percentages and decimals.



Homework 5: Sequences

learn by heart

arithmetic sequences

Work out what is happening in the sequences.
Can you figure out the missing terms?

Arithmetic sequences: **add or subtract**
the same number each time.

3 9 15 21 27 ...
 ↗ ↗ ↗ ↗
 +6 +6 +6 +6

A	7	12	17	22			H	-2			-8		
B	5	8	11	14			I	-12			-3		
C	16	13	10	7			J	0.1		0.14		0.18	
D	15	9	3	-3			K		0.24		0.18		
E	22	14	6				L		-1.3	-1.36			
F	9		15		21		M	$\frac{1}{2}$	1	$\frac{3}{2}$			
G	-3		5		13		N	$\frac{1}{2}$	$\frac{3}{4}$	1	$\frac{5}{4}$		

Think hard...

- (a) Is 205 a term in the sequence 1, 5, 9, 13, ... ?
(b) Is 200 a term in the sequence 4, 10, 16, 22, ... ?
(c) Is 1000 a term in the sequence 50, 65, 80, 95, ... ?
(d) Is 999 a term in the sequence 11, 20, 29, 38, ... ?
(e) Is 458 a term in the sequence 5, 12, 19, 26, ... ?



learn by heart-

1 3 6 10 15

+2 +3 +4 +5

4 8 16 32 64 ...



1. Write down the first 10 triangular numbers.

[illegible]

2. In each **geometric** sequence below, fill in the next term:

- a) 1, 3, 9, _____
- b) 2, 20, 200, _____
- c) 2, 10, 50, _____
- d) 0.4, 4, 40, _____

[illegible]

Fibonacci Sequence:
To get to the next term, you add together the previous two terms,
e.g. 1, 1, 2, 3, 5, 8, 13....
e.g. 7, 2, 9, 11, 20, 31 ...

- Question 1: The first 4 numbers in the Fibonacci sequence are 1, 1, 2, 3, ...

- What is the 5th term of the Fibonacci sequence?
- What is the 6th term of the Fibonacci sequence?
- Describe the rule for continuing the Fibonacci sequence.

Question 2: Find the next three terms of the following Fibonacci-style sequences

-
- (a) 2, 4, 6, 10, ...
- (b) 3, 6, 9, 15, ...
- (c) 4, 8, 12, 20, ...
- (d) 15, 23, 38, 61, ...
- (e) 5, 12, 17, 29, ...
- (f) -3, 5, 2, 7, ...

[illegible]



Homework 6: Substitution

examples

Given $y = 3$, evaluate:

$$2y + 5$$

$$\begin{aligned} &= 2 \times 3 + 5 \\ &= 6 + 5 \\ &= 11 \end{aligned}$$

$$2y^3$$

$$\begin{aligned} &= 2 \times 3^3 \\ &= 2 \times 27 \\ &= 54 \end{aligned}$$

$$\frac{4(y + 1)}{10}$$

$$\begin{aligned} &= \frac{4 \times (3 + 1)}{10} \\ &= \frac{16}{10} = 1.6 \end{aligned}$$

Given that $a = 3$, evaluate:

a) $10a$

e) $4a + 2$

i) $5(a - 1)$

b) a^2

f) $9(a - 1)$

j) a^3

c) $\frac{4a}{6}$

g) $2a^2$

k) $(2a)^3$

d) $5a - 1$

h) $(2a)^2$

l) $(a + 2)^2$

If $x = 2$ and $y = 3$, evaluate:

a) xy

b) $x - y$

c) $3x^2$

$$5 + 4 = \text{octagon}$$

$$7 - 4 = \text{star}$$

Now use what you've learned to find the answers to these:

$$(1) \text{star} + \text{star} + \text{star} =$$

$$(2) \text{star} + \text{octagon} + \text{star} =$$

$$(3) \text{octagon} + \text{star} + \text{octagon} =$$

$$(4) \text{star} + 5 + \text{octagon} =$$

$$(5) \text{octagon} + \text{octagon} - \text{octagon} =$$

$$(6) \text{octagon} + \text{star} - 3 =$$

$$(7) 4 \times \text{star} \times \text{octagon} =$$

$$(8) \text{octagon} + \text{star} - \text{octagon} =$$

$$(9) 4 \times \text{star} \div \text{star} =$$

$$(10) 7 \times \text{octagon} \div \text{octagon} =$$

$$(11) \text{star} + \text{octagon} \times \text{star} =$$

$$(12) \text{octagon} + \text{star} \times \text{octagon} =$$

$$(13) \text{octagon} \times \text{star} - \text{octagon} =$$

$$(14) \text{octagon} + 24 \div \text{star} =$$

$$(15) \text{octagon} \times \text{star} - \text{star} =$$

$$(16) 2 \times \text{octagon} - \text{star} =$$

$$(17) \text{star} + 54 \div \text{octagon} =$$

$$(18) \text{star} + \text{star} \times \text{octagon} =$$

$$(19) \text{star} + \text{star} + \text{octagon} \times \text{octagon} =$$

$$(20) \text{octagon} \times \text{octagon} + \text{star} \times \text{star} =$$



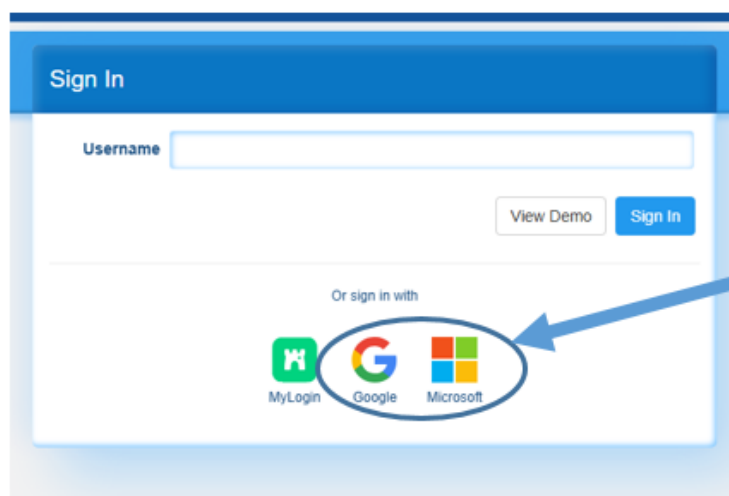
Homework 7:

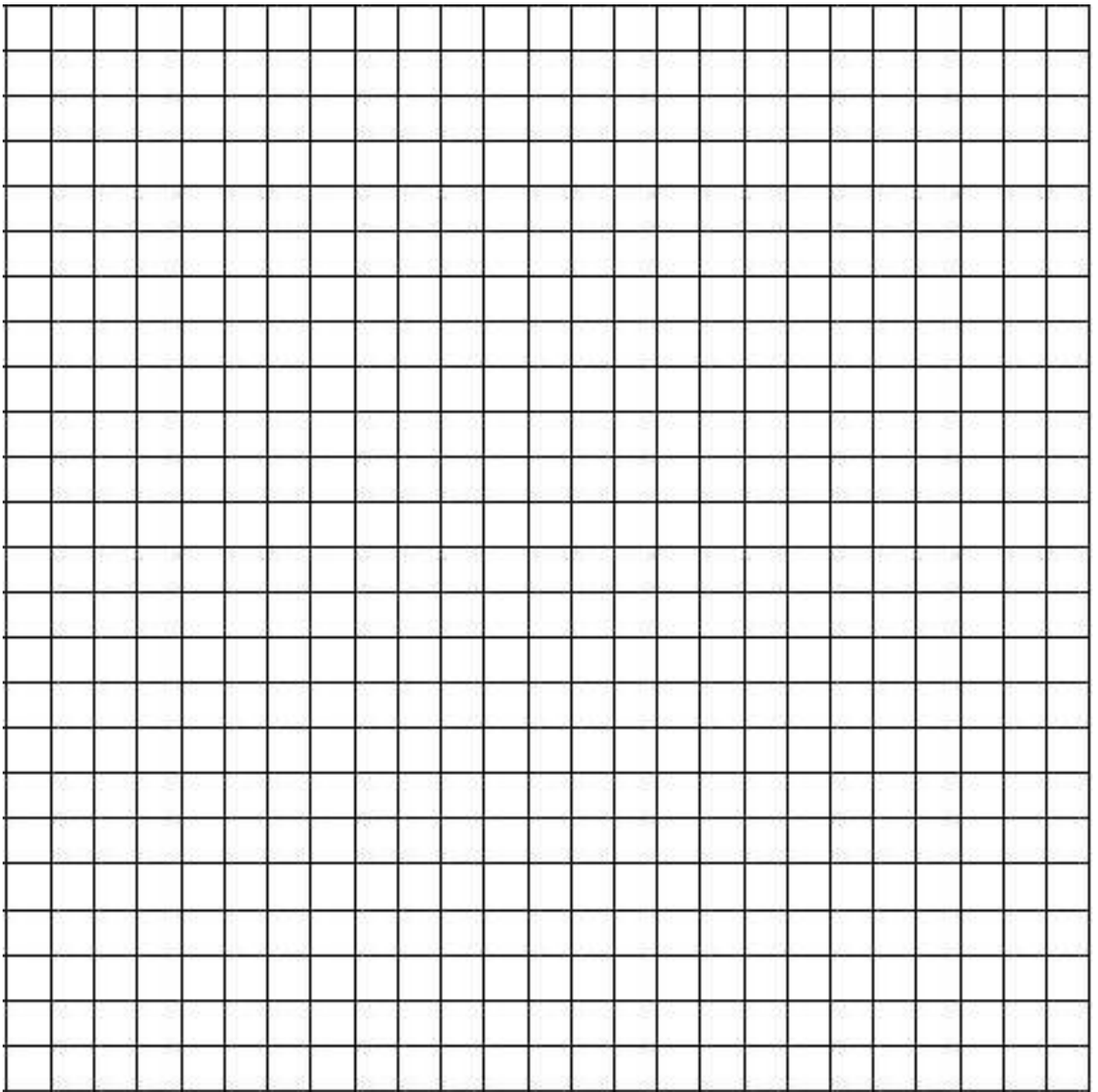


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Cistercian Numerals!

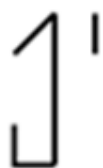
Using the key below, see if you can work out what numbers these Cistercian numerals represent.

1	2	3	4	5	6	7	8	9
10	20	30	40	50	60	70	80	90
100	200	300	400	500	600	700	800	900
1000	2000	3000	4000	5000	6000	7000	8000	9000

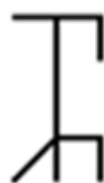
For example



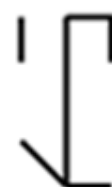
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= 7 0 _ _



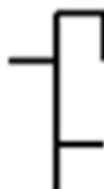
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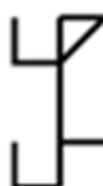
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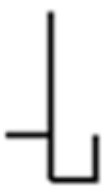
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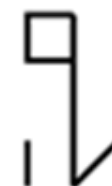
=



= _ _ 8 _



=



=



Homework 9: Numeracy

comparing decimals

learn by heart

Decimal Places: the number of digits after the decimal point, e.g. 0.405 has 3 decimal places.

Adding zeros to the end of a decimal does not effect its size, so $0.1 = 0.10 = 0.10000000$

examples

Which is larger 0.4 or 0.34?

True or false: $0.30 > 0.3$

→ $0.4 = 0.40$,
so 0.4 is larger.

False, these numbers are
equal.

By adding a zero to 0.4, both numbers have two decimal places and we can easily see that '40 hundredths' is bigger than '34 hundredths'

MENTAL STRATEGIES -
do these in your head

TIMESTABLES -
do these in your head

×	6	12	11	2	5	7	3	9	4	10	8
6											
2											
11											
5											
7											
3											
10											
8											
4											
12											
9											

1. 0.6 is the same as:

a) 0.600

b) 6.0

c) 0.06

d) 0.66

2. Which of these numbers is the **largest**?

a) 0.92

b) 0.149

c) 0.840

d) 0.09999

3. Select the **larger** number in each pair, or write = if they are the same.

a) 0.412 or 0.48

b) 1.38 or 1.4

c) 0.508 or 0.507

d) 7.05 or 7.005

e) 5.125 or 5.25

f) 0.3 or 0.29

g) 9.49 or 9.491

h) 10.46 or 1.047

i) 0.16 or 0.106

4. True or false?

a) $0.4 = 0.400$

c) $0.24 \geq 0.240$

e) $0.99 < 1.0$

b) $0.6 > 0.06$

d) $0.71 < 0.707$

f) $0.647 < 0.7$

5. Write down a positive number that is less than 0.01

6. Which of these numbers is the **smallest**?

a) 0.02

b) 0.4

c) 0.009

d) 0.013

Which is bigger, 1.6 or 2? Explain your answer.

In each row, decide which is the smallest number:

- a) 0.3 0.29 0.301 0.4 0.06
- b) 0.07 0.03 0.10 0.009 0.2
- c) 0.009 0.08 0.21 0.24 0.098
- d) 0.41 0.401 0.4 0.041 0.004
- e) 0.082 0.208 0.028 0.28 0.008

Which is bigger 0.8cm or 0.75cm?

Which is more, 0.205kg or 0.3kg?

Guess My Number

Use the clues to work out which number in the grid is being described.

My number is less than 0.7

My number is more than 0.2

My number has an 8 in the thousandths column

My number is less than 0.42

My number contains the digit 2

The digit in the hundredths column is odd

0.144	0.8	0.248
0.288	0.25	0.825
0.418	0.141	0.118
0.88	0.44	0.114
0.458	0.258	0.552



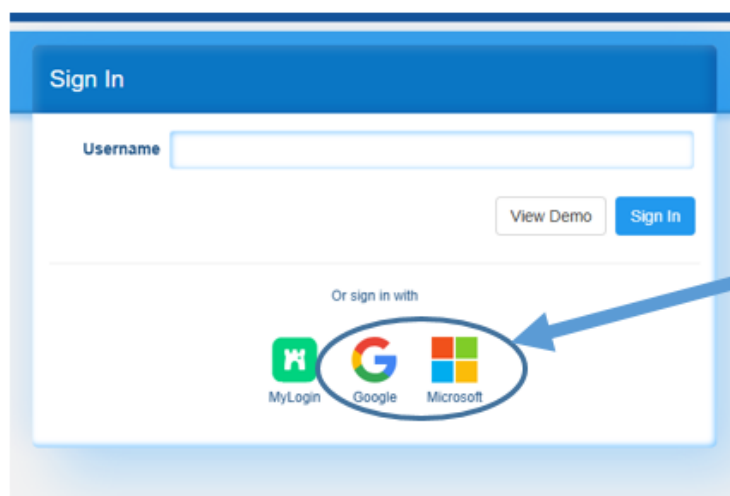
Homework 10:

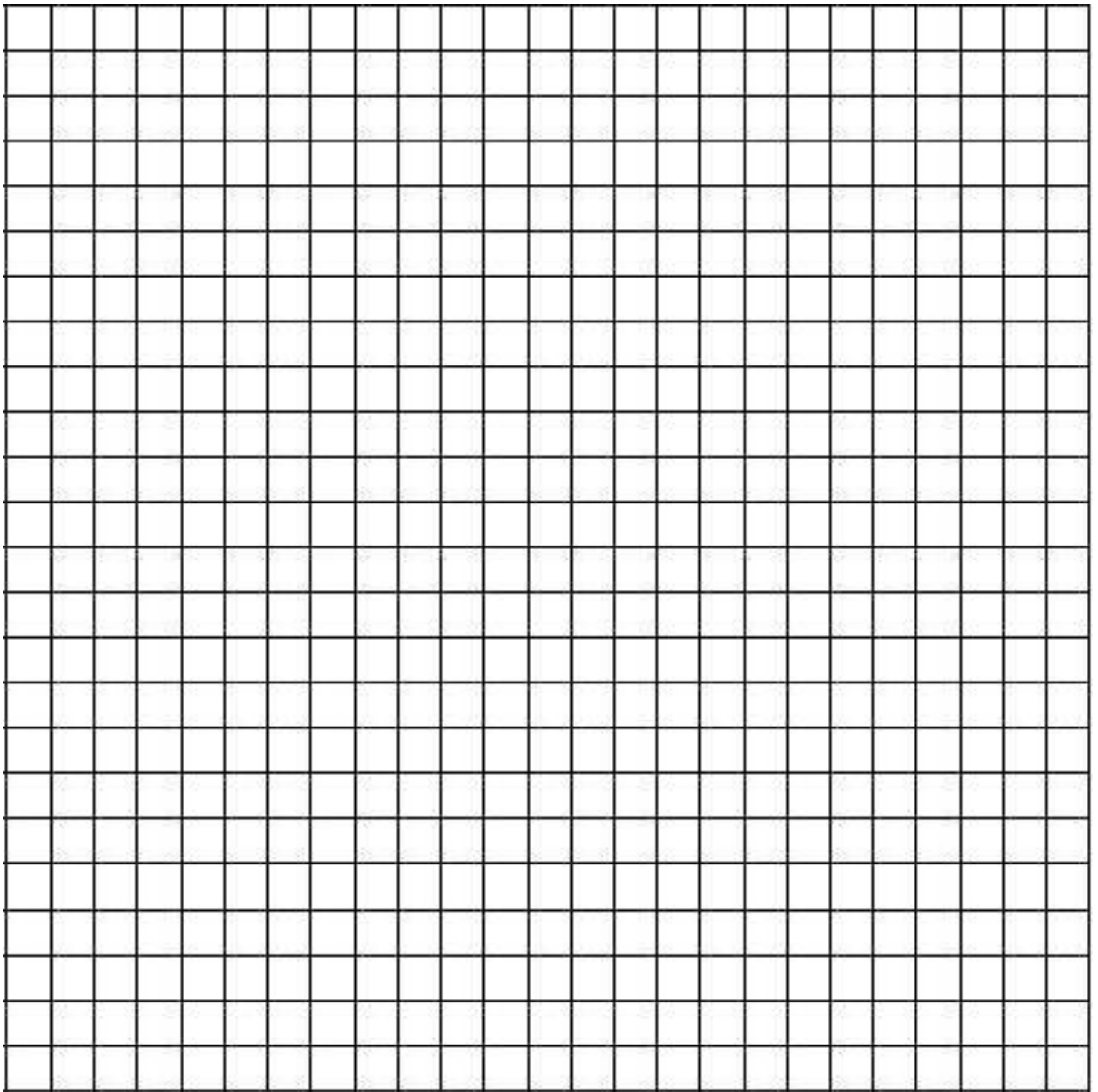


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25bloggsj@benjaminbritten.school and password: BlueCat123
(example)





Don't forget about your MEAT SHEETS

The purpose of your MEAT sheet is to identify both strengths and areas for development for you to work on independently using MathsWatch.

Area 1: Basic Skills (10 questions)	Area 2: Fractions (10 questions)	Area 3: Geometry (10 questions)
1. Addition of two numbers (10)	1. Addition of two fractions (10)	1. Area of a rectangle (10)
2. Subtraction of two numbers (10)	2. Subtraction of two fractions (10)	2. Perimeter of a rectangle (10)
3. Multiplication of two numbers (10)	3. Multiplication of two fractions (10)	3. Volume of a cube (10)
4. Division of two numbers (10)	4. Division of two fractions (10)	4. Surface area of a cube (10)
5. Addition of three numbers (10)	5. Addition of three fractions (10)	5. Area of a triangle (10)
6. Subtraction of three numbers (10)	6. Subtraction of three fractions (10)	6. Perimeter of a triangle (10)
7. Multiplication of three numbers (10)	7. Multiplication of three fractions (10)	7. Volume of a cylinder (10)
8. Division of three numbers (10)	8. Division of three fractions (10)	8. Surface area of a cylinder (10)
9. Addition of four numbers (10)	9. Addition of four fractions (10)	9. Area of a circle (10)
10. Subtraction of four numbers (10)	10. Subtraction of four fractions (10)	10. Perimeter of a circle (10)
Total: 100	Total: 100	Total: 100
Strengths	Areas for Development	

How to use your MEAT sheet

Each question above has a reference number next to it. These numbers link to video clips and practice questions on MathsWatch.

To access MathsWatch, go to www.itslearning.com

Username: <https://www.itslearning.com>

or a <https://www.itslearning.com>

Password: your birthday in the format <https://www.itslearning.com>

in the 'Index' tab, select the qualification as 'GCSE' and

type the reference number into the search box. Then

choose the clip that you need.

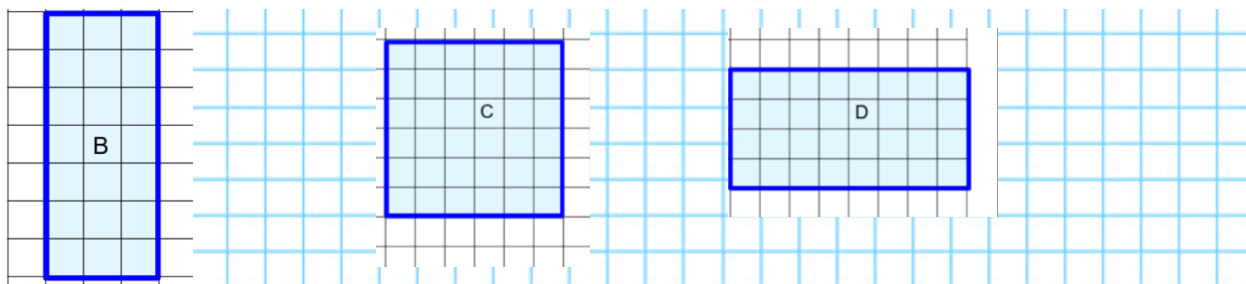


Homework 11: Perimeter

learn by heart

The perimeter of a shape is the total length of all of its sides.

Find the perimeter of the following rectangles and squares.



- 1). 3 cm 3 cm
2). 8 cm 3 cm
3). 7 cm 5 cm
4). 5 cm 5 cm

- 6). 6 cm 14 cm
7). 9 m 9 m
8). 7 m 7 m
9). 6 cm 9 cm

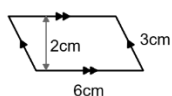
- 11). 15 cm 3 cm
12). 7 cm 21 cm
13). 0.5 m 0.5 m
14). 2.5 m 8 m

- 1) 4 cm 3 cm 4 cm 3 cm 8 cm 6 cm
2) 7 cm 1 cm 3 cm 6 cm 4 cm 7 cm

The perimeter of a shape is the total length of all of its sides.

examples

1. Work out the perimeter of the parallelogram.



$$6 + 3 + 6 + 3 = 18$$

Perimeter = 18cm

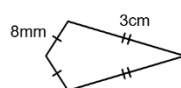
2. Work out the perimeter of a regular hexagon with sides of length 15mm.

$$6 \times 15 = 90$$

Perimeter = 90mm

The sides of a regular shape all have the same length.

3. Work out the perimeter of the kite.

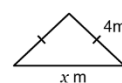


$$8 + 8 + 30 + 30 = 76$$

Perimeter = 76mm (or 7.6cm)

Make sure the units match.

4. The triangle has a perimeter of 14m. Work out the value of x.

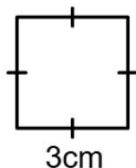


$$14 - 2 \times 4 = 14 - 8 = 6$$

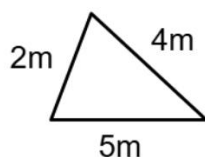
x = 6

1. Work out the perimeter of each shape:

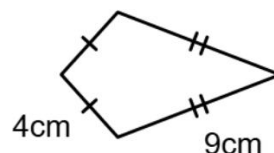
a)



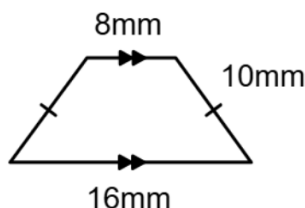
b)



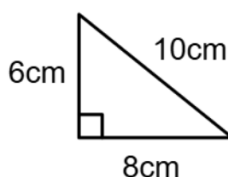
c)



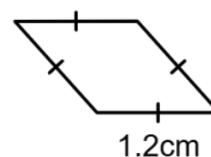
d)



e)



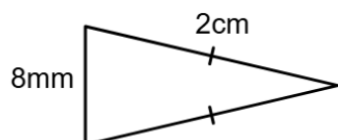
f)



2. Work out the perimeter of a regular octagon with side lengths of 4cm.

What has been done wrong in the calculations for the perimeter of these shapes?

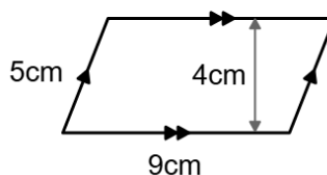
a)



$$8 + 2 + 2 = 12$$

Perimeter = 12cm

b)



$$5 + 5 + 4 + 9 + 9 = 32$$

Perimeter = 32cm

Homework 12: Numeracy

Literacy challenge: Anagrams!

Rearrange the letters below to form 3 keywords used in maths:

ONVIIIDS

NOICTALLACU

POSTRANEIO

MENTAL STRATEGIES -
do these in your head

TIMESTABLES -
do these in your head

×	3	9	8	4	2	10	7	5	11	6	12
9											
2											
4											
8											
10											
3											
7											
11											
5											
12											
6											

learn by heart

Numbers can be rounded to the closest 10, 100 or 1000

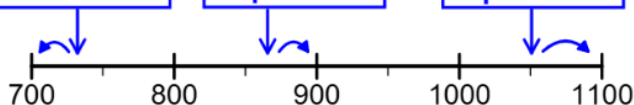
If the number is exactly half way between, always round up.

Nearest hundreds

734 rounds down to 700

863 rounds up to 900

1050 rounds up to 1100



examples

Round 8462 to the nearest 100

8 4 | 6 2
↑

5 or more?

Yes

→ 8500

Write 13,409 correct to the nearest thousand.

1 3 | 4 0 9
↑

5 or more?

No

→ 13,000

Round 735 to the nearest 10

7 3 | 5
↑

5 or more?

Yes

→ 740

1. Round each number to the **nearest ten**:

a) 63

b) 35

c) 149

d) 3462

2. Round each number to the **nearest hundred**:

a) 375

b) 844

c) 3960

d) 6543

1. Round these numbers to the nearest 10:

- a) 64 c) 108
- b) 92 d) 203

2. Round these numbers to the nearest 100:

- a) 556 c) 76
- b) 289 d) 1450

Arrange these cards to make a number that rounds to 9480, to the nearest ten:

5

7

9

4

Arrange these cards to make a number that rounds to 2700, to the nearest hundred:

4

7

2

9

Which of the following numbers equal **30** when rounded to the nearest ten?
Choose all that apply.

23	25	29	31	35	342
----	----	----	----	----	-----

Which of the following numbers equal **700** when rounded to the nearest hundred?
Choose all that apply.

684	773	650	1725	750	744
-----	-----	-----	------	-----	-----

George says:
"The smallest number that equals 50 when rounded to the nearest ten is 46"
Explain why George is wrong.

Write down all the **integers** that equal **90** when rounded to the nearest ten.

examples

Round:

a) 4.327 to 1 decimal place 4.3|27 4.3

1. Which of these numbers have 1 decimal place? Select all that apply.

- a) 43 b) 4.5 c) 2.75 d) 62.0 e) 200.30

2. Round each number to 1 decimal place:

- a) 3.62 c) 2.45 e) 4.319 g) 105.1098

Homework 13: Analogue clock

learn by heart

The hour hand is the shorter hand

The minute hand is longer

The hour is split into 5 minute intervals.
The 1 represents 1 lot of 5 minutes after the hour

15 minutes past the hour (at 3) is pronounced 'quarter past'

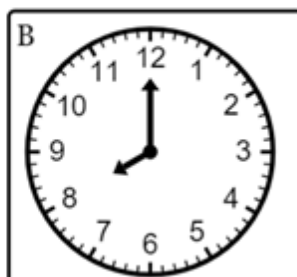
30 minutes past the hour (at 6) is pronounced 'half past'

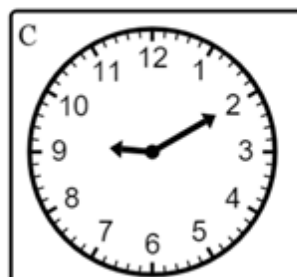


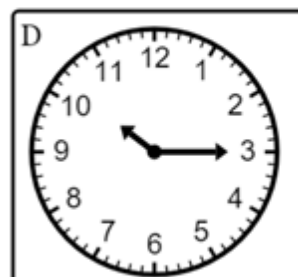
The minute hand is at 2, this means
 $2 \times 5 = 10$
minutes past the hour,
so 4.10

1. Write the correct time under each clock

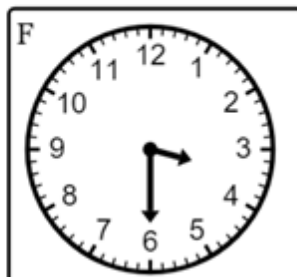




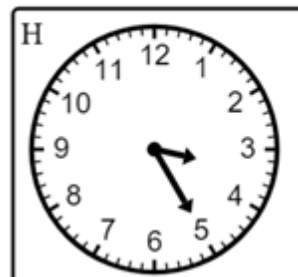




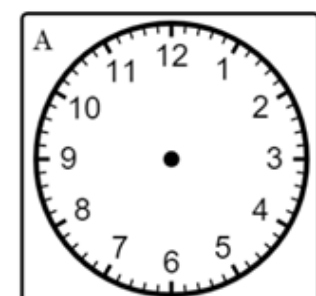




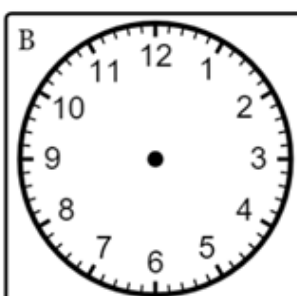




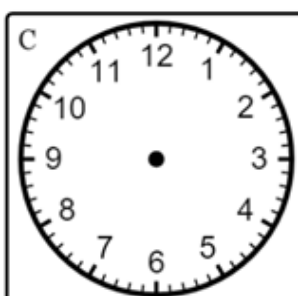
2. On each clock draw the hands in the correct place to show the time given



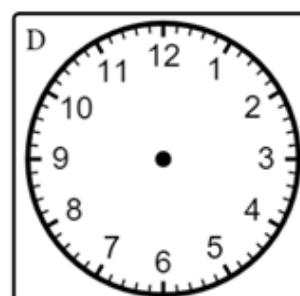
11.05



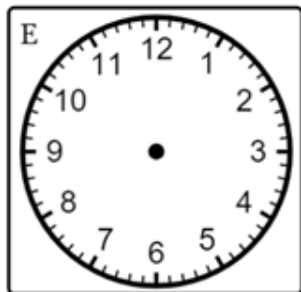
4.15



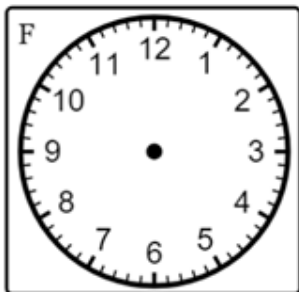
9.20



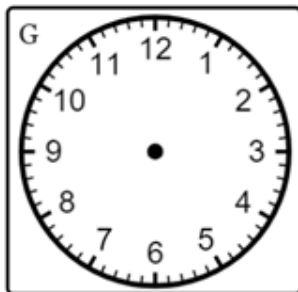
6.30



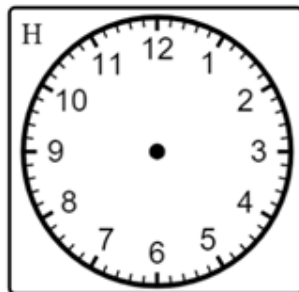
Twenty past eight



Twenty five past seven



Half past one



Ten past twelve

1. Work out the given times:

a) 20 minutes after 3:15 pm

b) 4 hours after 11 am

c) $\frac{1}{2}$ hour after 6:50 pm

d) 35 minutes after 10:40 am

e) 40 minutes **before** 9:30 am

f) $\frac{3}{4}$ hour **before** 4:20 pm

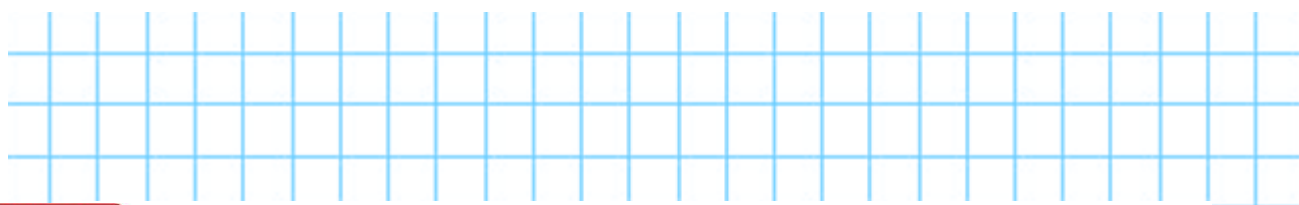
2. A TV programme is 30 minutes long and starts at 7:10 pm.
At what time does the programme end?



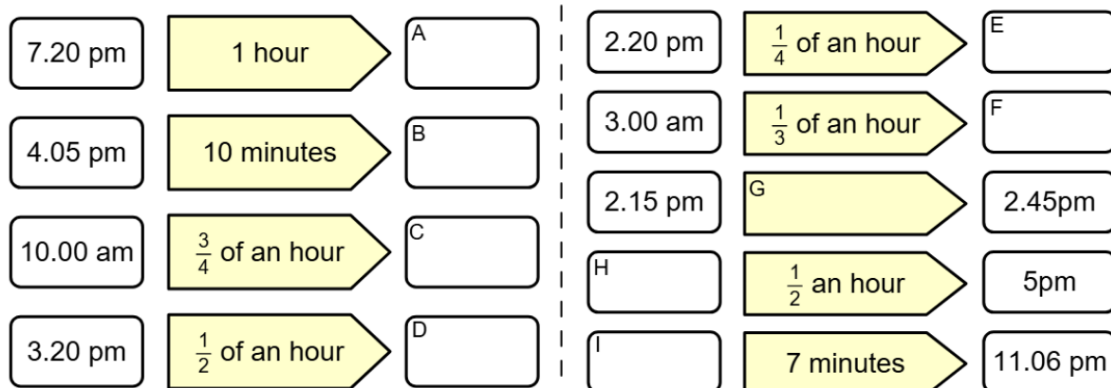
3. Vikki leaves home at 2:45 pm and walks to a park.
She arrives at the park 25 minutes later. At what time is this?



4. A meal takes 50 minutes to cook.
The meal needs to be ready for 6:30 pm.
At what time should the chef start cooking the meal?



CHALLENGE Work out the missing times in these flow diagrams:





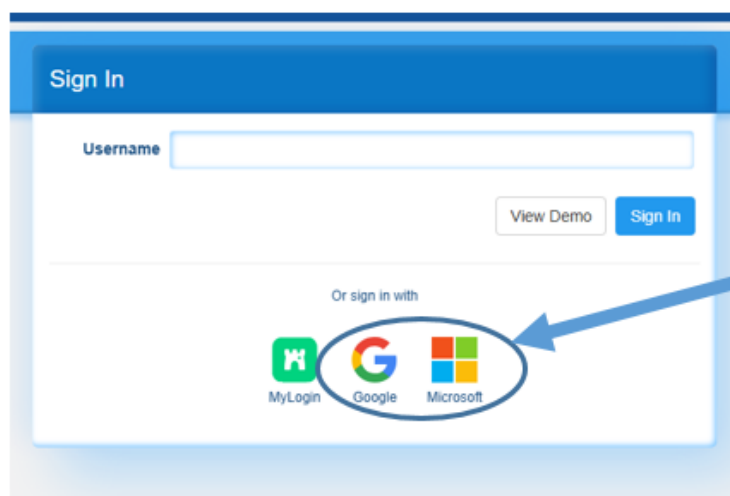
Homework 14:

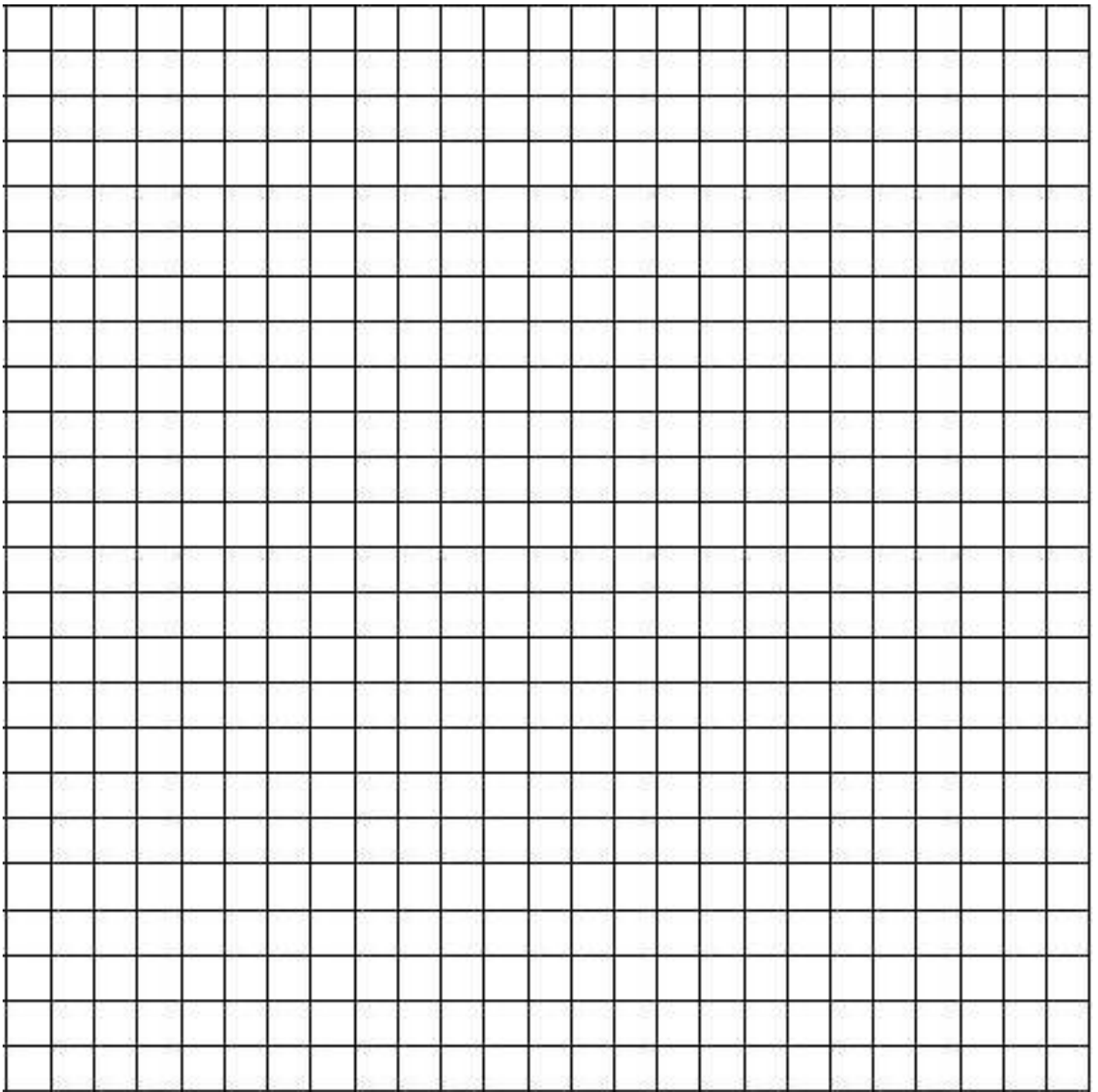


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1. Addition of two numbers (10 marks) 2. Subtraction of two numbers (10 marks) 3. Multiplication of two numbers (10 marks) 4. Division of two numbers (10 marks) 5. Fractions of a number (10 marks) 6. Decimals of a number (10 marks) 7. Percentages of a number (10 marks) 8. Area and perimeter (10 marks) 9. Volume (10 marks) 10. Mass and length (10 marks)	1. Word problems involving addition (10 marks) 2. Word problems involving subtraction (10 marks) 3. Word problems involving multiplication (10 marks) 4. Word problems involving division (10 marks) 5. Word problems involving fractions (10 marks) 6. Word problems involving decimals (10 marks) 7. Word problems involving percentages (10 marks) 8. Word problems involving area and perimeter (10 marks) 9. Word problems involving volume (10 marks) 10. Word problems involving mass and length (10 marks)	1. Logical reasoning (10 marks) 2. Pattern recognition (10 marks) 3. Classification (10 marks) 4. Sequencing (10 marks) 5. Comparison (10 marks) 6. Inference (10 marks) 7. Prediction (10 marks) 8. Evaluation (10 marks) 9. Justification (10 marks) 10. Conclusion (10 marks)
Total: 100	Total: 100	Total: 100
Strengths	Areas for Development	

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 Password: your birthday in the format **MM/DD/YYYY** (e.g. 01/01/2001)
 In the 'Index' tab, select the qualification as 'KS2' and type the reference number into the search box. Then choose the clip that you need.

EXTRA SUPPORT

*If you need help with completing your homework, please use Mathswatch and watch the video clips for the topic. If you are still stuck, speak to **your** class teacher.*

If you need to contact the Head of Maths regarding any worries or concerns, you can contact Miss Pankhurst at:

j.pankhurst@benjaminbritten.school

RESOURCES PROVIDED BY:

Numeracy Ninjas

Mr Carter Maths

Miss B's Resources

NRich

Worksheet Works

Dr Austin

Mathspad

