

# 8B1-B2 Maths Work Booklet w/c 13th July 2020

## **Instructions**

As this is your last Maths project of the academic year; each day you have ten questions to answer that cover all the topics you have learnt throughout the year!! Well done for all your hard work in Maths!!



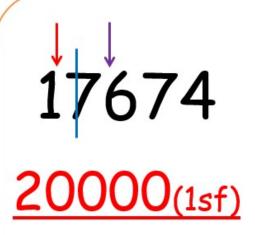


# Monday



## Example

Round the following to 1 significant figure (1sf).



- 1. Find the first significant figure
- 2. Draw a line to the right of it.
- 3. Look at the next number.
- If it's 5 or more we round up.
- If it's less than 5 we leave same.
- 4. Everything else goes to zero.



#### **Monday Questions**

1	Wor	k out	£23	49 +	£7.82
-	1101	V UUL	LLU.	T-2 '	L/.UL

2 Evaluate 26

3 **Solve** 5x - 1 = 34

4 Round 56354 correct to 1 significant figure

5 Work out -7 + 9

Find the **nth term** 12, 14, 16, 18

7 Simplify the ratio 15:27

8 Work out 5 × £4.55

9 Work out the mean 3, 12, 7, 12, 11

10 Complete the **equivalent fraction**  $\frac{2}{3} = \frac{?}{15}$ 

#### **Answers:**

1)

2)

3)

4)

5)

6)

7)

8)

9)

10)





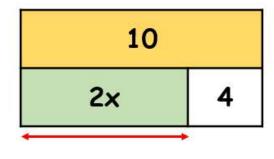
# Tuesday



#### Solving Equations- Unknowns on one side



Solve the equation 2x + 4 = 10



What would the value of 2x have 6 to be?

If 2x=6 what is 1x? x=3

How does this look algebraically?

$$2x + 4 = 10$$

$$-4 \qquad -4$$

$$2x = 6$$

$$\div 2 \qquad \div 2$$

$$x = 3$$

### **Tuesday Questions**

**Answers:** 

1 1	Mor	k out	£15 50	- £6.85
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3 **Solve** 
$$3x - 10 = 23$$

10 Complete the **equivalent fraction** 
$$\frac{5}{6} = \frac{?}{54}$$



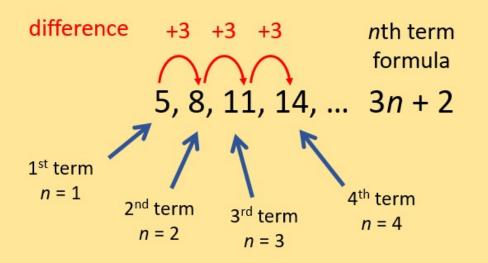


## Wednesday



#### **Linear Sequences**

(Arithmetic Sequences)



In a linear sequence, the numbers increase/decrease by the same amount every time, just like a times table.

We want to find a formula for the *n*th term.  $n = \text{the position of the number } (5^{\text{th}}, 6^{\text{th}}, 20^{\text{th}}, 1000^{\text{th}})$ 



#### **Wednesday Questions**

1 Work out £132.99 - £99.45

2 Evaluate 5<sup>3</sup>

3 **Solve** 20 - 3x = 2

4 Round 0.8059 correct to 1 significant figure

5 Work out 6 - - 9

6 Find the **nth term** 6, 10, 14, 18

7 Simplify the ratio 108:18

8 Work out 6 × £15.99

9 Work out the median 5, 2, 12, 6, 4, 7

10 Complete the **equivalent fraction**  $\frac{3}{7} = \frac{?}{63}$ 

**Answers:** 

1)

2)

3)

4)

5)

6)

7)

8)

9)

10)

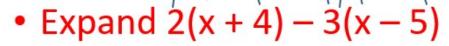




# **Thursday**



#### Example 1: Expanding brackets



\*\*Think Mrs Bridge's Dodgy Eyebrows!!

2x + 8 - 3x + 15 (You then need to simplify)

Collect the 'x' terms = -x

Collect the numbers = 23

Combine = -x + 23



	Thursday Questions	Answers:
1	Estimate 5647 + 10874	1)
2	Work out $\frac{2}{3} \times \frac{1}{4}$	2)
3	Work out £47.60 ÷ 8	3)
4	Expand 5(3x – 2)	4)
5	Express 45% as a fraction in its lowest form	5)
6	What is the <b>highest common factor</b> of 35 and 63?	6)
7	Work out 7 × -5	<b>3</b> )
8	Express the ratio 4:14 in the form 1:n	7)
9	<b>Solve</b> $6x + 2 = 4x + 14$	8)
10	Express 24 as a product of prime factors	9)
		10)





# Friday





#### Simplifying ratio

What common factors do these numbers have?

Simplify 24: 52

\*\* Both in the 4 times table

Simplifies to:

6:13

Simplify 108: 48

\*\* Both in the 12 times table

Simplifies to:

9:4

## Friday Questions

- 2 Evaluate 10<sup>2</sup>
- 3 Solve 3(8x + 1) = -21
- 4 Round 1992.3 correct to 1 significant figure
- 5 Work out -5 + -12
- 6 Find the nth term 5, 11, 17, 23
- 7 Simplify the ratio 80:24
- 8 Work out 6 × £125.50
- 9 Work out the **mode** 2, 4, 3, 1, 4, 2, 4
- 10 Complete the **equivalent fraction**  $\frac{7}{16} = \frac{?}{48}$

#### **Answers:**

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)
- 7)
- 8)
- 9)
- 10)

