5.3.21 - Quick Maths

A

○ Multiply each of these by 10

| 30 | 16 | 15 | 2 |

○ _____ divided by 7 = 5

○ -3, ___, -1, ___, ___, 2
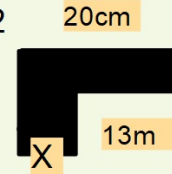
○ Complete -

| 210 | | |

Are there lots of possibilities? Why?

B

○ 2,356 - 1,265 =

○ 2,567 + _____ = 600

○ 6,000 - _____ = 4,590

○ 1/4 + 1/2 =

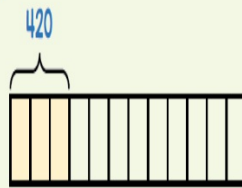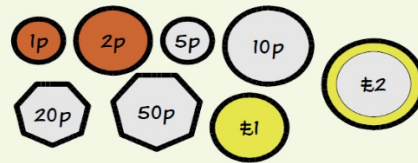○ 3 x 6 = _____ x 2

Explain

Is x 6cm? Why?

20cm

13m

X

Challenge

Caroline saves the same amount of money each month.
She saves £420 in 3 months.

How much does she save in a year?

420

Investigation

1p   2p   5p   10p

20p   50p   £1   £2

**What is the fewest number of coins you need to make
(a) 83p (b) £1.34 (c) £5.27?**

5.3.21

Learning Objective:
Today I am learning to count and calculate negative numbers

✓

Key Vocabulary
- negative   - zero
- more than/less than/equal
- number line
- positive
- temperature

Use the White Rose slides/video to support these teaching slides before you complete the main task.

Success Criteria
I will be successful if I can -
○ Identify a negative number.
○ Count in negative numbers.
○ Calculate the difference of negative numbers.
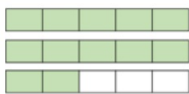○ Show and represent negative numbers.

Flashback 4

1) Complete

$\frac{1}{5}$ of $\boxed{}$ = 5

2) Calculate $5 - \frac{5}{8}$

3) Complete the sentence.

There are ___ fifths altogether.

4) Find the product of 139 and 5

Complete this as quickly as you can (verbally or through writing it down).

Quick Review! - Roman Numerals

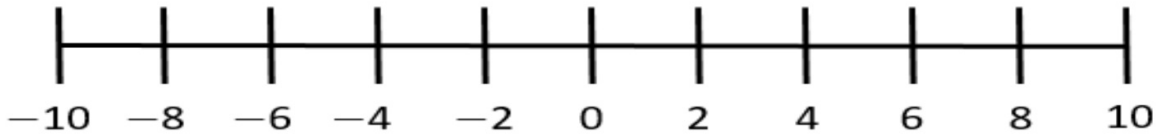*Write your answer as a number or Roman Numeral*

XIII rounded to the nearest 10 is

XXVI rounded to the nearest 10 is

XLIX rounded to the nearest 10 is

Challenge - Can you write three questions where the answer would be 50?

Negative Numbers

$$-10 \quad -8 \quad -6 \quad -4 \quad -2 \quad 0 \quad 2 \quad 4 \quad 6 \quad 8 \quad 10$$

Negative numbers are numbers **below zero (o)**

Complete this as quickly as you can (verbally or through writing it down).

C° -30° -20° -10° 0° 10° 20° 30° 40°

F° -20° 0° 20° 40° 60° 80° 100°

LEFT   **RIGHT**

-10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10

Origin

Negative numbers   Positive numbers
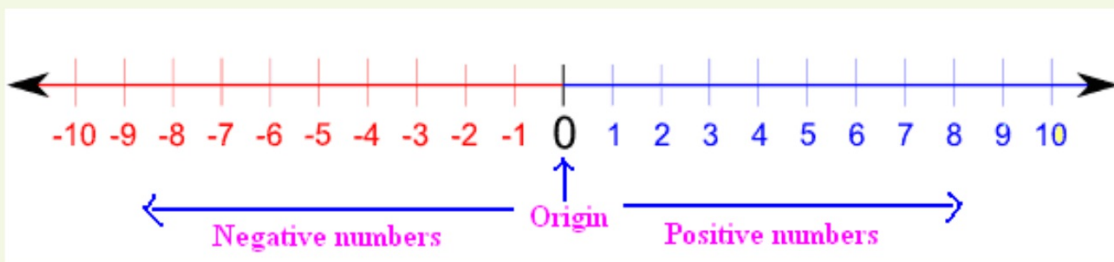
The numbers less than **zero** are negative **numbers**.

Which do you think is larger? −7 or −2?   −8 or 0?

For negative numbers what might seem to be a *larger* number is in fact *smaller*. On the number line the negative numbers are to the LEFT of zero. -5 is less than 4 because -5 lies to the left of 4 on the number line. -1 is greater than -3 because it lies to the RIGHT of -3 on the number line.

Negative Numbers

< = or >

Try these -

20 _____ - 20

-10 + 5 ____ - 5

-4 _____ -8

-4 + 6 _____ 5

Negative Numbers

< = or >

Ted thinks that if counts **forwards** 10 from -10, the answer would be -20.
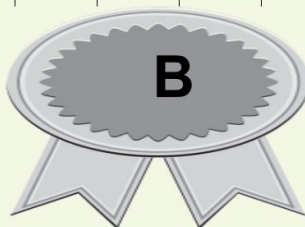
Ted is _____ because _____

Negative Numbers

Ted thinks the halfway point between -15 and 11 is 8. Is he right? Prove it using a numberline

Main Task

5.3.21
Negative Numbers

A   B   C

Now complete '5.3.21

Challenges

Can you spot the mistake in these number sequences?

a) $2, 0, 0, -2, -4$

b) $1, -2, -4, -6, -8$

c) $5, 0, -5, -10, -20$

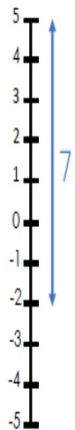Explain how you found the mistake and convince me you are correct.

I know... so...

The difference between **-2** and **5** is **7**

The difference between **-2** and **4** is ___

The difference between **-3** and **4** is ___

The difference between **-3** and ___ is **9**

True or False?

True or False? — Negative numbers

-25 degrees is warmer than -5 degrees.

White Rose Maths