03.02.21 Fluent in five

1) 20% of 845 =
2) 35% of 580 =
3) 3% of 960 =
4) 8593 x 74 =
5) 4446 ÷ 13 =
6) Which shape has 4 equal sides and 4 equal angles? Is there more than one option?

1) 10% of 670 =
2) 1% of 810 =
3) 20% of 845 =
4) 752 x 3 =
5) 8217 ÷ 6 =
6) Which shape has 4 equal sides and 4 equal angles? Is there more than one option?

WALT find pairs of values

https://vimeo.com/503100955

Yesterday we found the values of single substitutions such as a + b = 10.

Today, we are going to look at values with multiples. For example 2a + b = 10

How does this change what we would do?

a and b are whole numbers.

$$2a + b = 14$$

Complete the table to show different possible values for a and b.

a	0	1	2	3	4	5	6	7
$2a$	0	2						
b	14							
$2a + b$	14	14	14	14				

c and d are both integers less than 15 but greater than zero.

$3c - d = 2$

Complete the table to show different possible values for c and d.

c	1	2	3	4	5
$3c$	3				
d	1				
$3c - d$	2	2	2		

b) Explain why there are no other possible values for c and d.

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x and y are both multiples of 5 less than 100

If $2x = y$, circle the possible values of x and y.

$x = 20, y = 20$

$x = 10, y = 20$

$x = 20, y = 10$

$x = 35, y = 70$

$y = 90, x = 45$

Ron has four digit cards.

- Two of the cards have the same value.
- All of the cards are less than 10 but greater than zero.
- All of the cards are odd.
- The sum of the four cards is 24

Find two possible sets of cards.

Set 1 ☐ ☐ ☐ ☐

Set 2 ☐ ☐ ☐ ☐

Varied Fluency

In this equation, a and b are both whole numbers which are less than 12.

$$2a = b$$

Write the calculations that would show all the possible values for a and b.

Chose values of x and use the equation to work out the values of y.

$$7x + 4 = y$$

Value of x	Value of y

$2g + w = 15$

g and w are positive whole numbers.

Write down all the possible values for g and w, show each of them in a bar model.

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$ab + b = 18$

Mo says,

a and b must both be odd numbers

Is Mo correct?
Explain your answer.

Large beads cost 5p and small beads cost 4p

Rosie has 79p to spend on beads.

4p

5p

How many different combinations of small and large beads can Rosie buy?

Can you write expressions that show all the solutions?