Hi All

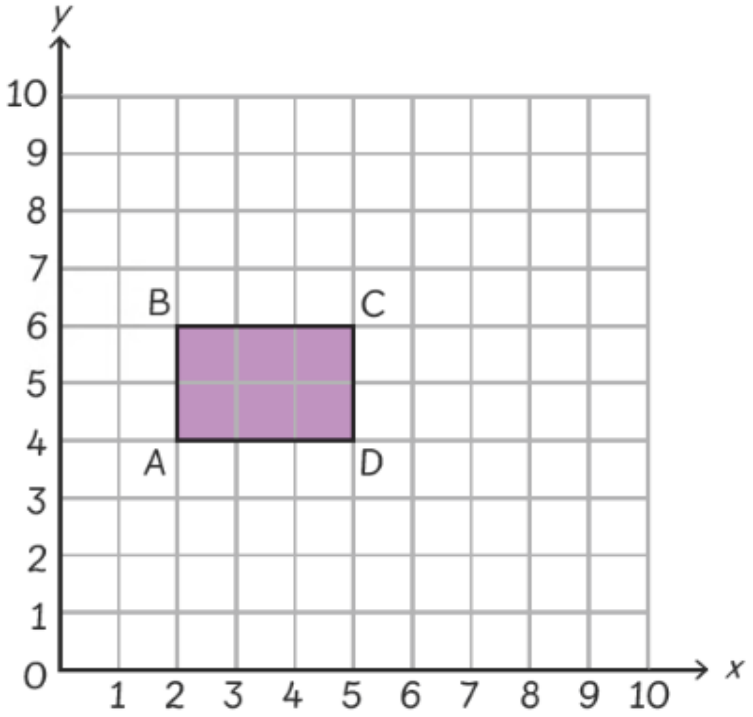
Welcome to week 11 of your home learning. This week we will be finishing off our work on position and movement, and then there is a short quiz to complete. The last two lessons are consolidating our work on Roman numerals; here there is a mixture of lessons, research and games. Enjoy!

Lesson 1 – Monday 22nd June 2020

Work through the lesson below and try the guided practice.

Describing Movements.

In Focus



How can we move rectangle ABCD so that one of its vertices ends up at (7,8)?

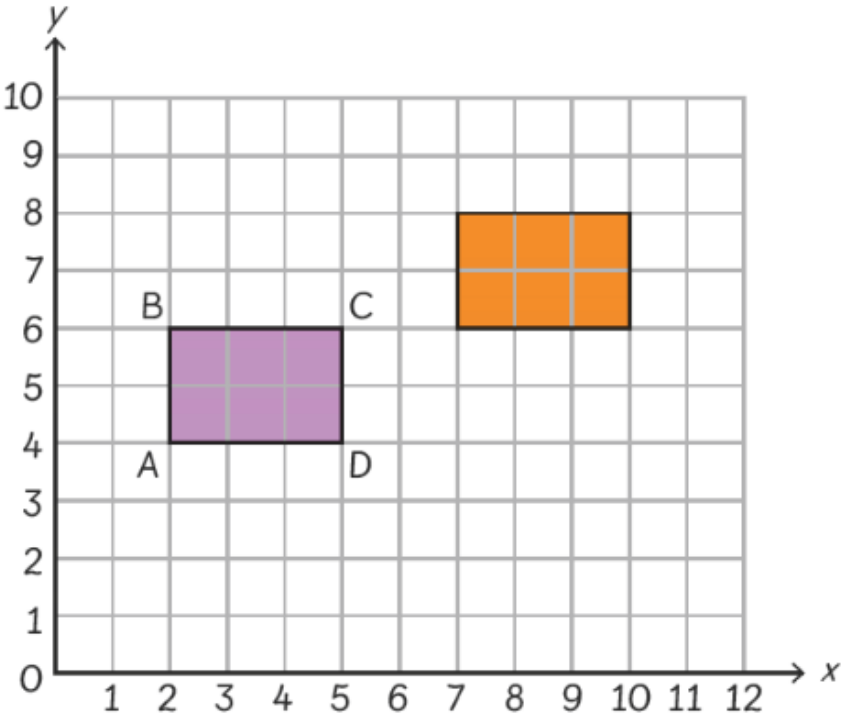
Let's Learn

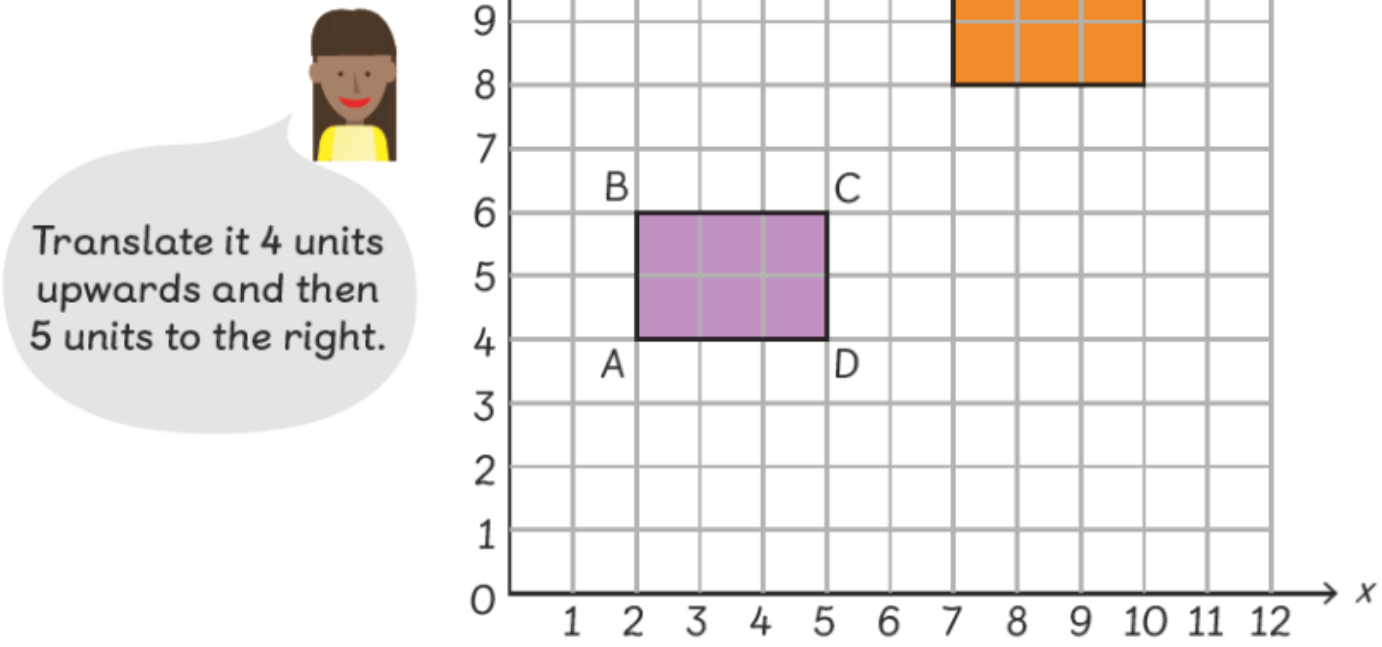
1

Move it up 2 units and then 5 units to the right.

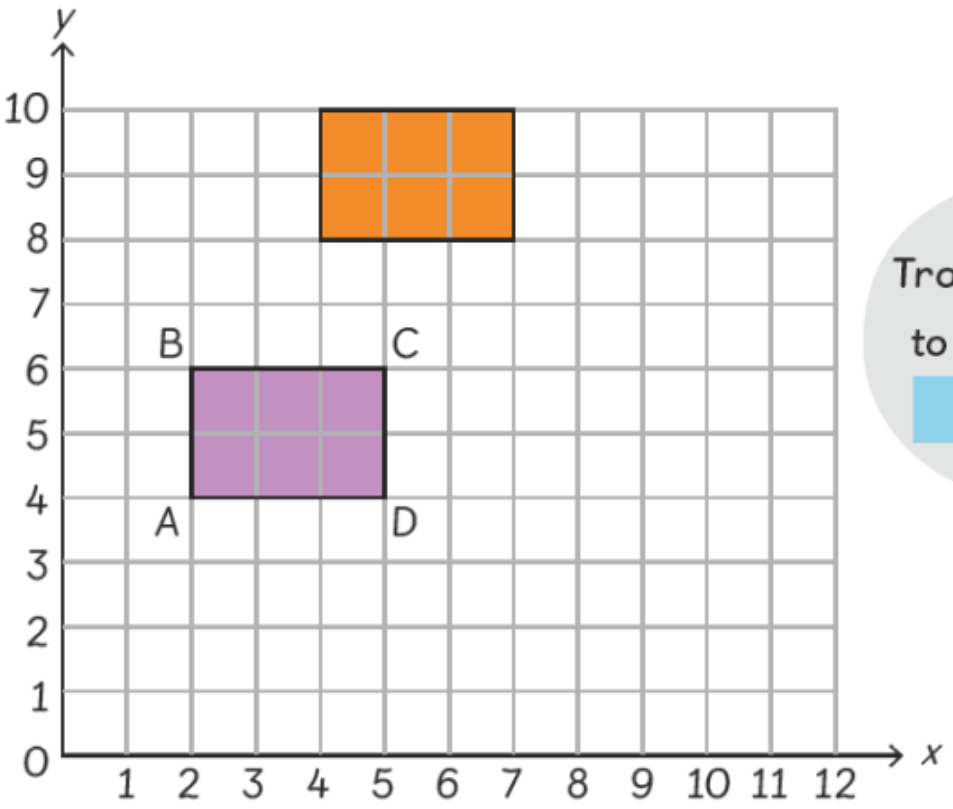
Translate it 5 units to the right and then 2 units upwards.

Who is correct?

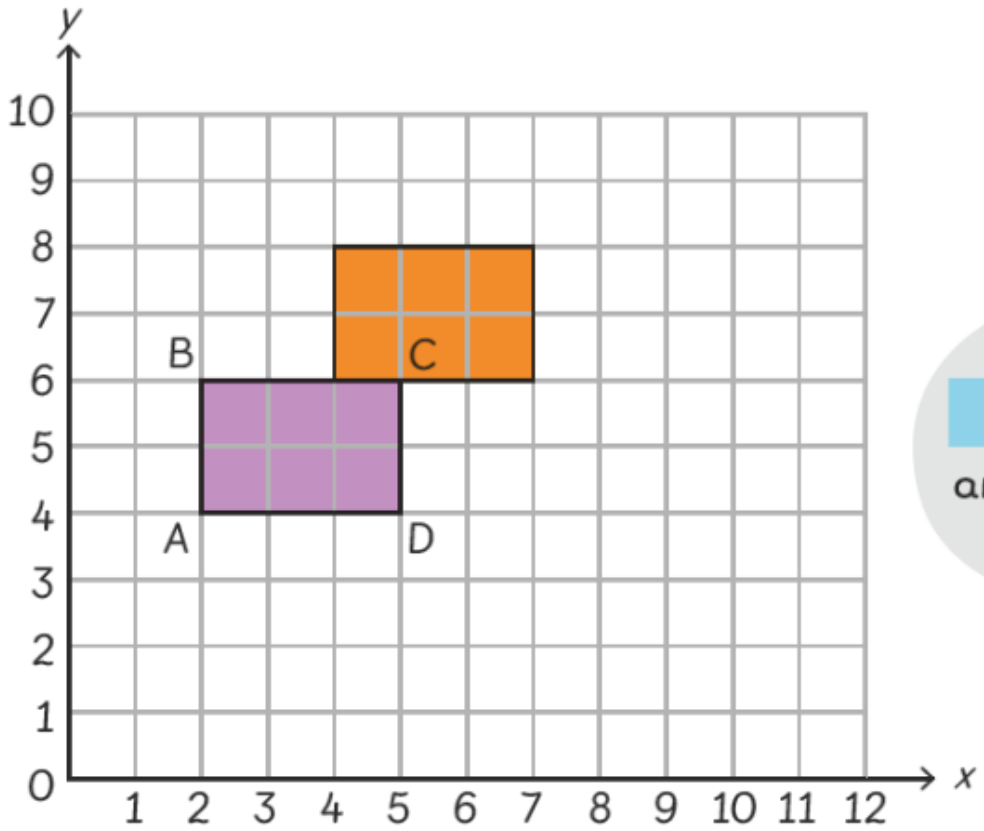




Translate it 4 units upwards and then 5 units to the right.



Translate it ____ units to the right and then ____ units upwards.



Translate it ☐ units upwards and then ☐ units to the right.

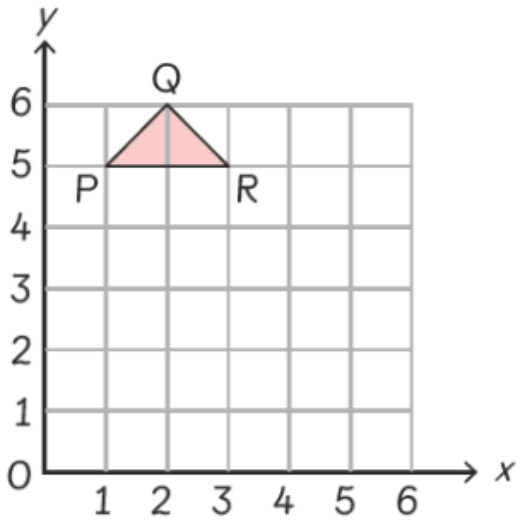
Guided Practice

Describe the translation that results in:

(a) P being at (3,2).

(b) Q being at (3,2).

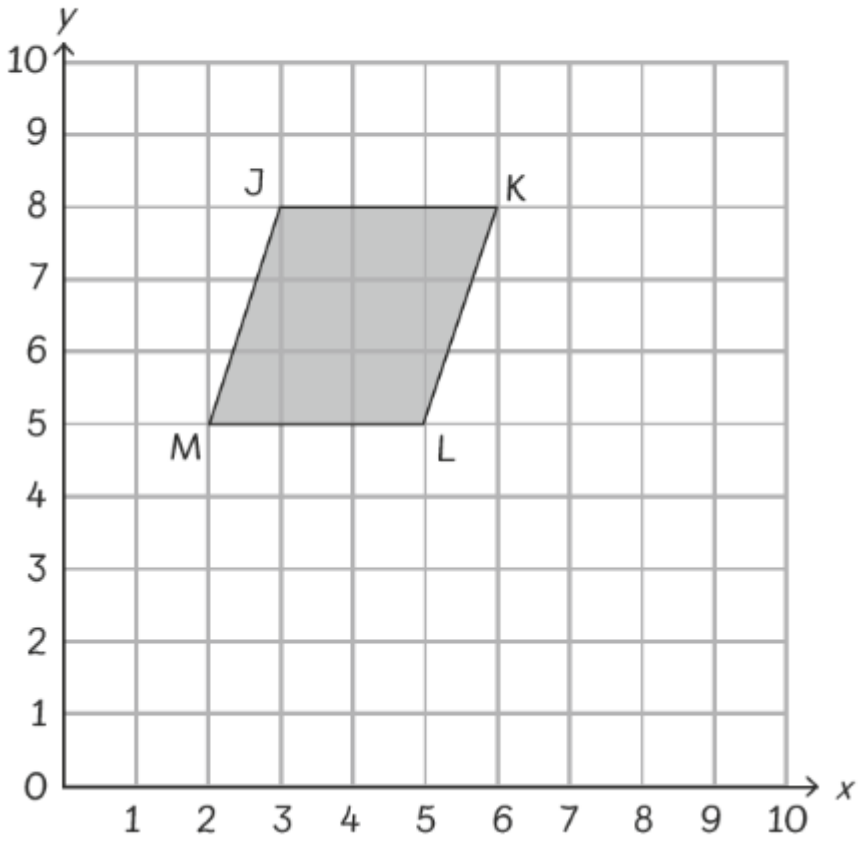
(c) R being at (3,2).



What are the coordinates of the other vertices?

Blue questions

1 A parallelogram is drawn on a square grid.



Describe the translation of parallelogram JKLM that results in:

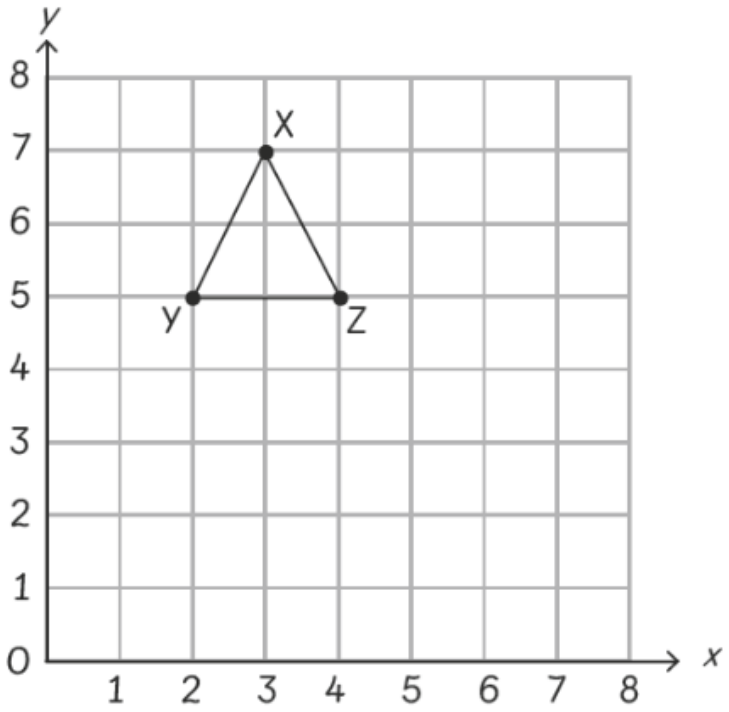
(a) Point J moving to (4,7):

(b) Point K moving to (10,4):

(c) Point L moving to (10,0):

(d) Point M moving to (5,2):

2 A triangle is drawn on a square grid.



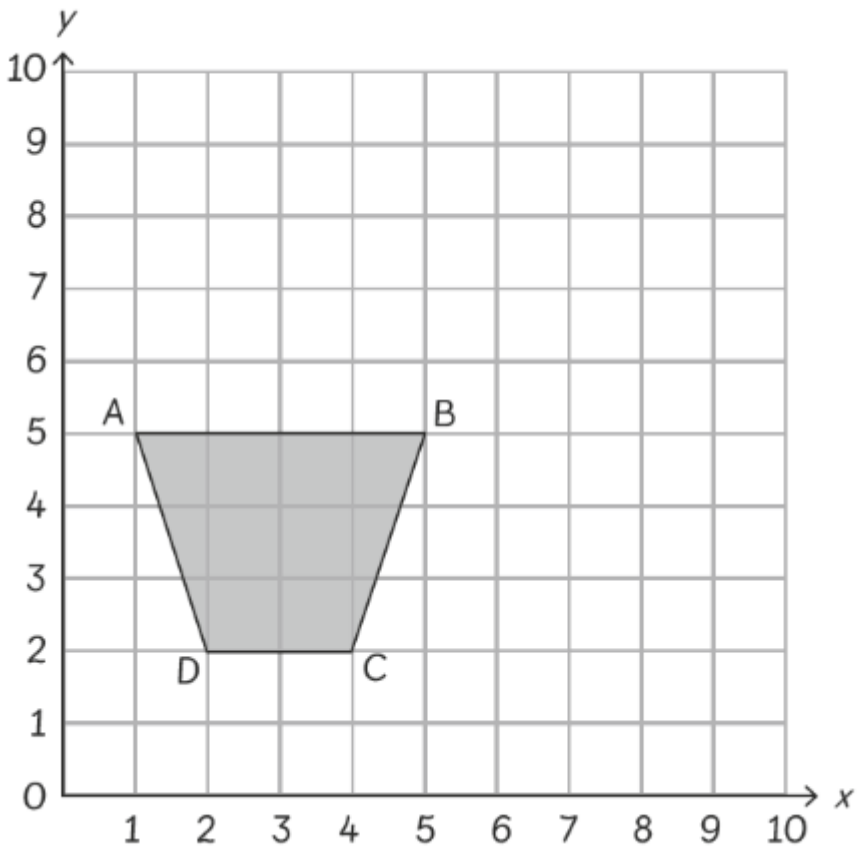
Describe two different translations which move the triangle XYZ so that one of its vertices ends up at (6,3).

(a)

(b)

Yellow Question

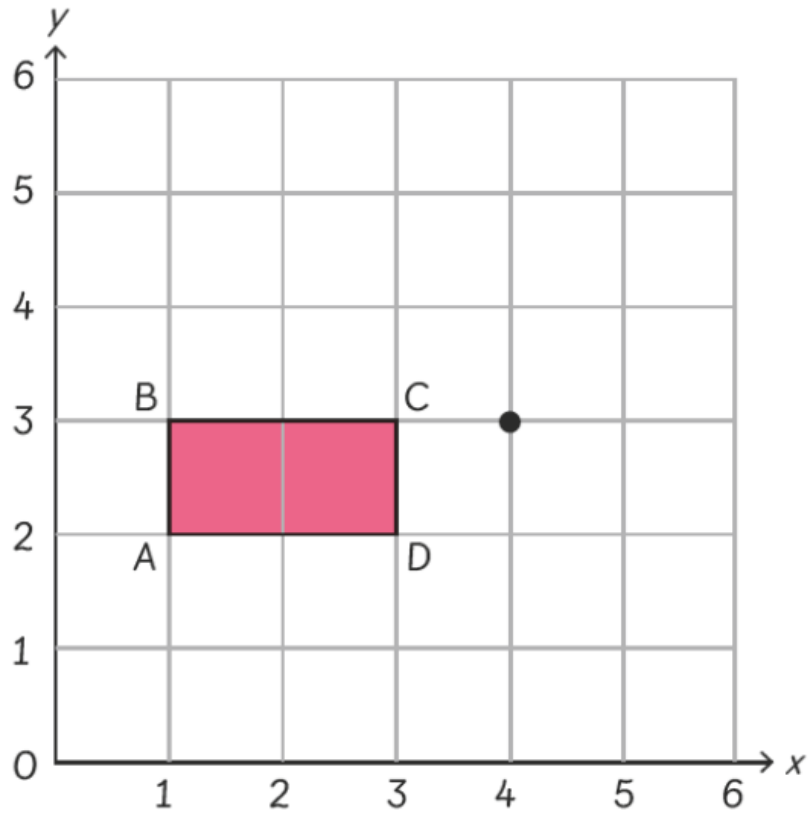
Draw a parallelogram EFGH on the square grid or draw a grid on a piece of paper. Your challenge is to make the parallelogram the same area as the trapezium ABCD.



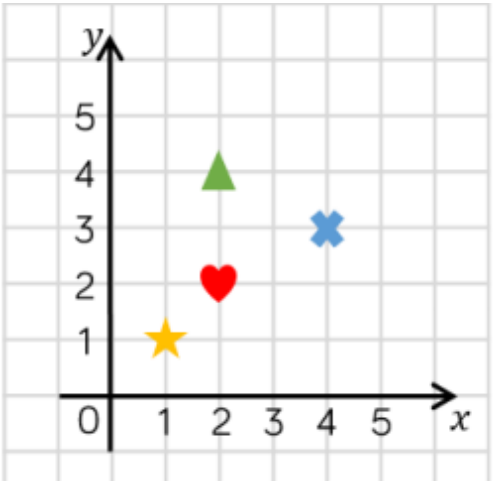
Lesson 2 – Tuesday 23rd June 2020

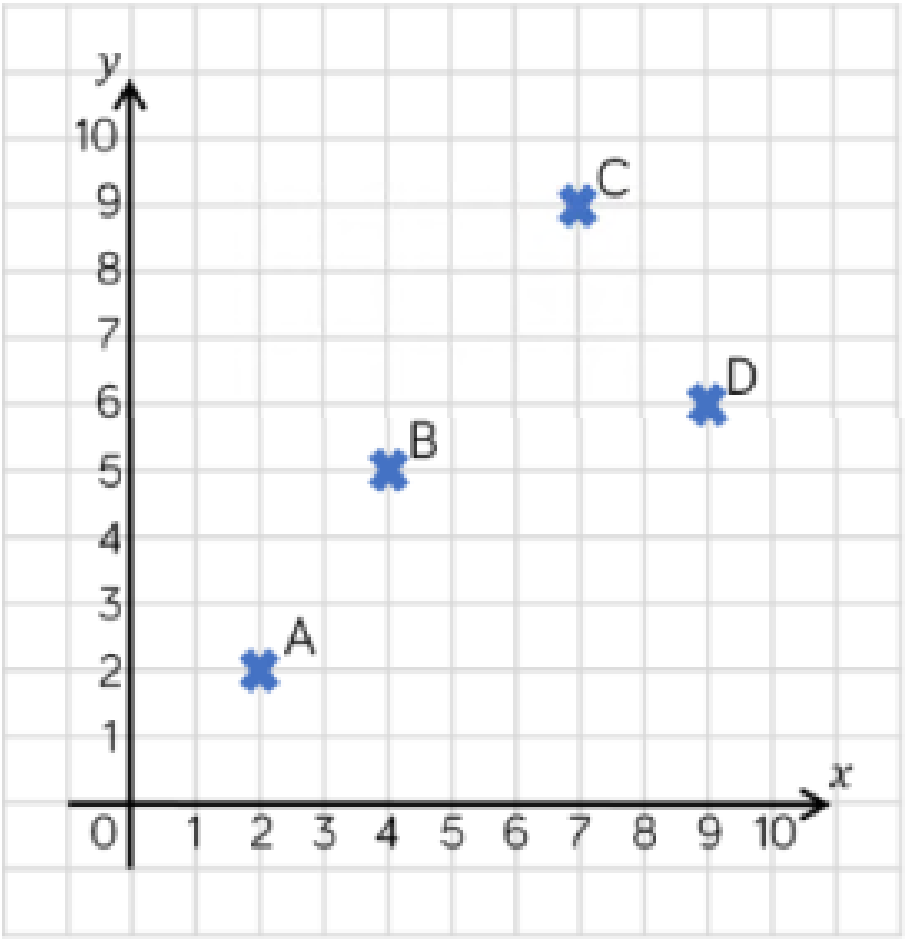
These questions consolidate our work on position and movement. There is no guided practice.

How can we move rectangle ABCD so that one of its vertices ends up at (4,3)?



Describe the translation from:





Describe the translation from:
A to B B to C C to D D to A

Plot two new points and describe the translations from A to your new points.

Describe the translation of shape A to shape B.

Describe the translation of shape B to shape A.

What do you notice?

Lesson 3 – Wednesday 24th June 2020

https://forms.office.com/Pages/ResponsePage.aspx?id=gRWRthA7JkKACMfU-MzjCs6m1fJMmQZKvbiI8cSsNM9UM1FaMlg5MzRWT1dYOTNONFY5RVdQWE1OMC4u

Lesson 4 – Thursday 25th June 2020

Writing Roman Numerals from 1 to 20.

In Focus

The Romans used letters to write numbers. They used I for 1, V for 5 and X for 10.

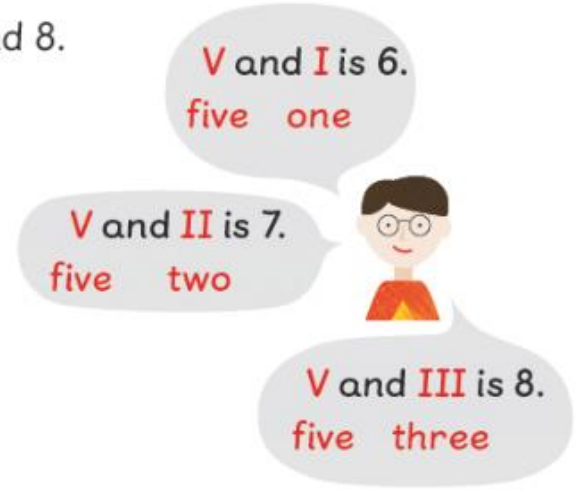
Find out how the Romans wrote the numbers 1 to 20.

1 Write the Roman numerals for 2, 3 and 20.

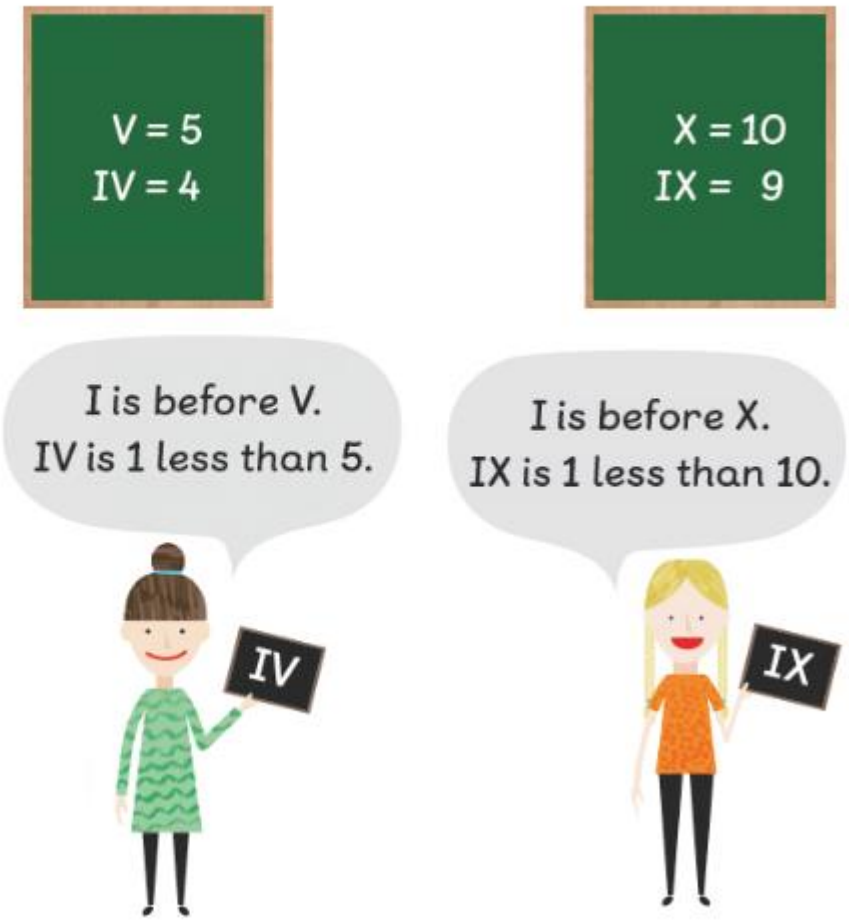
I = 1	X = 10
II = 2	XX = 20
III = 3	? = 30

2 Write the Roman numerals for 6, 7 and 8.

V = 5
VI = 6
VII = 7
VIII = 8



3 Write the Roman numerals for 4 and 9.



4 Write the Roman numerals for the numbers 11 to 19.

10 = X	1 = I	11 = XI
10 = X	2 = II	12 = XII
10 = X	3 = III	13 = XIII
10 = X	4 = IV	14 = XIV
10 = X	5 = V	15 = XV
10 = X	6 = VI	16 = XVI
10 = X	7 = VII	17 = XVII
10 = X	8 = VIII	18 = XVIII
10 = X	9 = IX	19 = XIX

Guided Practice

1 Some watch and clock makers use Roman numerals to make their watches and clocks look good.

Show the numbers 3, 6, 9 and 12 using Roman numerals.

2 Kings and queens often use Roman numerals in their names.

King Louis XIV of France ruled from 1643 to 1715.
What number is XIV?

3 Roman numerals are sometimes used on tombstones.

(a) What do you think $\frac{8}{\text{III}}$ 1896 and $\frac{27}{\text{VI}}$ 1972 stand for?

(b) What does XIX stand for?

Blue Questions.

1 Help Holly find her way home.
Write the Roman numerals next to the numbers given.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

2 Match.

V	13
IV	8
XIII	5
VIII	15
XV	4
VI	3
XIX	6
	19

Yellow Question

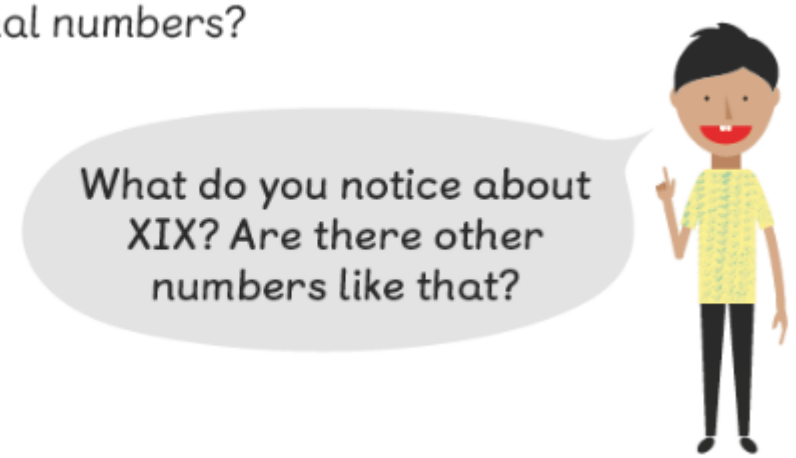
When the Roman numeral for 4 is seen in a mirror, it looks like 6.

IV | VI

These are some mirror images of numbers in Roman numerals.

IIV IX IIXX IVX XIX

What are the original numbers?

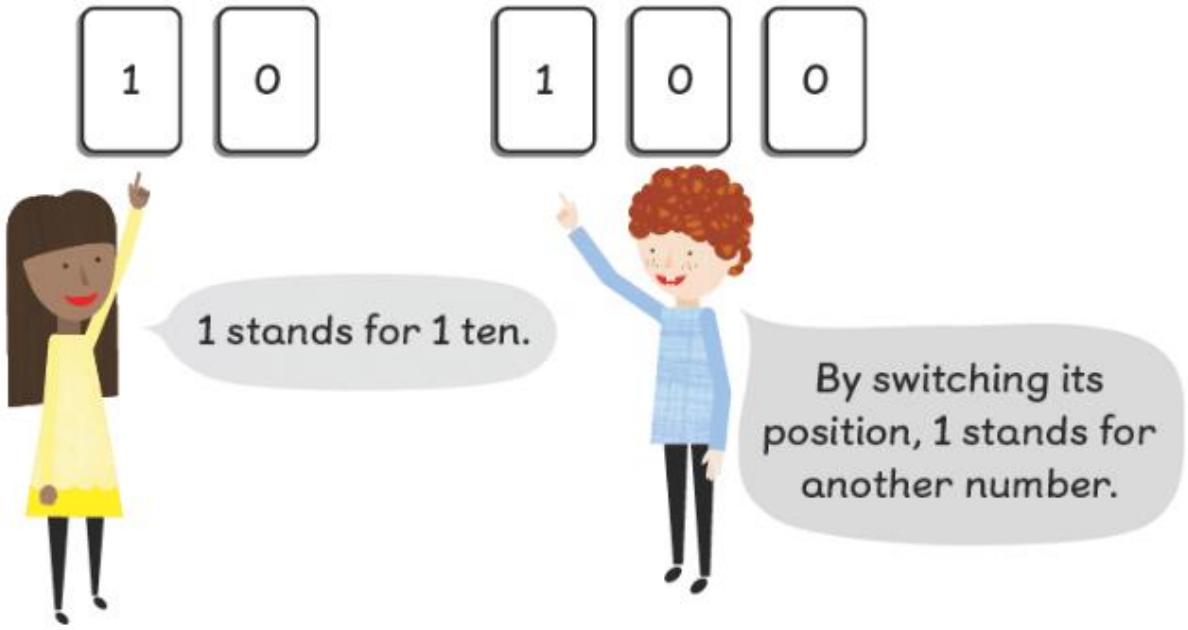


Lesson 5 – Friday 26th June 2020

Writing Roman Numerals to 100.

In Focus

We use place value and zero.



The Romans did not use place value or zero. When they needed a larger number, they used a new letter.

V = 5	X = 10
L = 50	C = 100

Find out how the Romans wrote the numbers 20, 30, 40 and so on.

Let's Learn

1 Write the Roman numerals for 20, 30, 60, 70 and 80.

X = 10

XX = 20

XXX = 30

X = 10, L = 50

LX = 60

LXX = 70

LXXX = 80

2 Write the Roman numerals for 40 and 90.

L = 50

XL = 40

10 less than 50 is 40.

C = 100

XC = 90

10 less than 100 is 90.

In Roman numerals, placing 10 before 50 makes 40.
Similarly, placing 10 before 100 makes 90.

Guided Practice

We still use the Roman numerals in Olympic Games.

1. London hosted the 4th, 14th and 30th Summer Olympic Games. Write 4, 14 and 30 in Roman numerals.

   _____ Olympic Summer Games

2. Tokyo is hosting the 32nd Summer Olympic Games. Write 32 in Roman numerals.

   _____ Olympic Summer Games

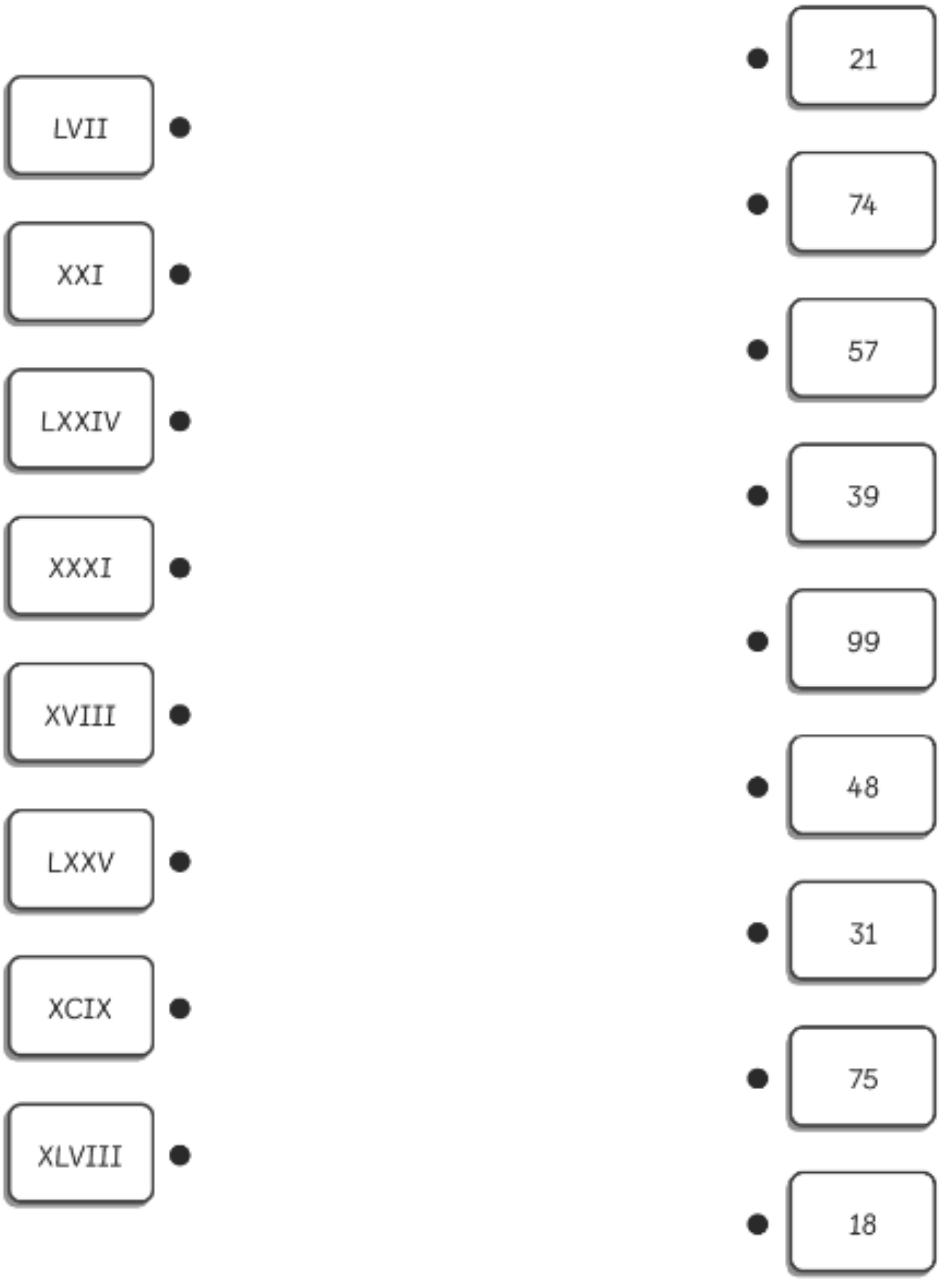
Blue Questions.

1. Write the Roman numerals next to the numbers given.

5	
10	
15	
20	
25	
30	
35	
40	
45	
50	

55	
60	
65	
70	
75	
80	
85	
90	
95	
100	

2 Match.


LVII
XXI
LXXIV
XXXI
XVIII
LXXV
XCIX
XLVIII
21
74
57
39
99
48
31
75
18

3 Complete the table.

Numbers	Roman Numerals
16	
	XXIV
33	
40	
	LI
	LXVI
69	
	LXXV
77	
96	

Yellow Question

In Roman numerals:

I	stands for	1
V	stands for	5
X	stands for	10
L	stands for	50
C	stands for	100

Charles is looking for numbers from 1 to 100 that use more than 5 letters when written in Roman numerals. One such number is given. Find ten more such numbers, and the Roman numeral of each one. Are there others?

Numbers	Roman Numerals
28	XXVIII

Own research

If you have enjoyed the lessons on Roman Numerals, then have a look at the BBC bitesize page below where you will find a little more history about it and a fun quiz.

https://www.bbc.co.uk/bitesize/topics/zcvgh39/articles/z9tkng8