

Summer week 2

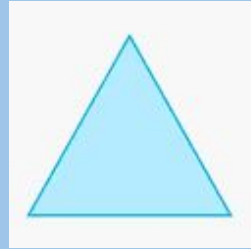
Lesson 5

Can I subtract 4 digit numbers with exchanging?

Fast Five - answers are on the next slide!

1) What is double 52?

2) What type of triangle is this?



3) $6 \times 300 =$

4) $50 \times 70 =$

5) Mully is hiding behind the largest multiple of 8 without going past 52. Where is Mully?

Fast Five - answers are on the next slide!

1) What is double 52? **104**

2) What type of triangle is this? **Equilateral**



3) $6 \times 300 =$ **1800**

4) $50 \times 70 =$ **3500**

5) Mully is hiding behind the largest multiple of 8 without going past 52. Where is Mully? **48**

When subtracting with 4 digits, we use the same method as we do for addition... column method! Except we are subtracting! It is the same method as you did when subtracting 3 digits.

$$7465 - 3212 =$$

$$5 - 2 = 3$$

$$60 - 10 = 50 \quad -$$

$$400 - 200 = 200$$

$$7000 - 3000 = 4000$$

Th	H	T	O
7	4	6	5
3	2	1	2
4	2	5	3

When subtracting, sometimes the number we are trying to subtract in the column is bigger than the number above it. When this happens, we have to exchange with the number in the next column.

$6452 - 2317 =$

	Th	H	T	O
	<hr/>			
	6	4	5	2
-	2	3	1	7
	<hr/>			
	<hr/>			

$2 - 7 =$

$2 - 7 =$

7 is larger than 2, so we need to exchange from the next column along, the tens column.

We take 1 ten (10 ones) from the 50, which leaves 40.

	Th	H	T	O
	6	4	5	2
-	2	3	1	7

$$2 - 7 \longrightarrow 12 - 7$$

And add the 10 onto
the 2 to make 12.

$$12 - 7 = 5$$

Th	H	T	O
6	4	4 5	12
2	3	1	7
			5

Once we've completed the subtraction from the ones column, we move onto the tens column. If we have exchanged, we need to remember to use the **NEW** number, not the original one!

It is not **50** - **10**

It is now

$$40 - 10 = 30$$

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Th	H	T	O
6	4	5	¹ 2
2	3	1	7
		3	5

Now we are going to subtract the hundreds.

$$400 - 300 = 100$$

Th	H	T	O
6	4	5	¹ 2
2	3	1	7
	1	3	5

Lastly, we subtract the thousands column.

$$6000 - 2000 = 4000$$

Th	H	T	O
6	4	5	2
2	3	1	7
4	1	3	5

When subtracting, sometimes the number we are trying to subtract in the column is bigger than the number above it. When this happens, we have to exchange with the number in the next column.

$6321 - 2194 =$

	Th	H	T	O
	6	3	2	1
-	2	1	9	4

We take **1** hundred (10 tens) from the **300**, which leaves **200**.

And add the **100** onto the **10** to make **110**.

$$\text{So } 1 - 9 \longrightarrow 110 - 90 = 20$$

9 is larger than 2, so we need to exchange from the next column along, the tens column.

Th	H	T	O
6	2 3	1 2	1
2	1	9	4
		2	7

We take **1** hundred (10 tens) from the **300**, which leaves **200**.

$$200 \longrightarrow 100 = 100$$

	Th	H	T	O
	6	23	112	11
-	2	1	9	4
		1	2	7

$$6321 - 2194 = 4127$$

$$6000 - 2000 = 4000$$

	Th	H	T	O
	6	3	2	1
-	2	1	9	4
	4	1	2	7

Try this question! The answer is on the next slide!

$6421 - 3158 =$

	Th	H	T	O
	6	4	2	1
-	3	1	5	8

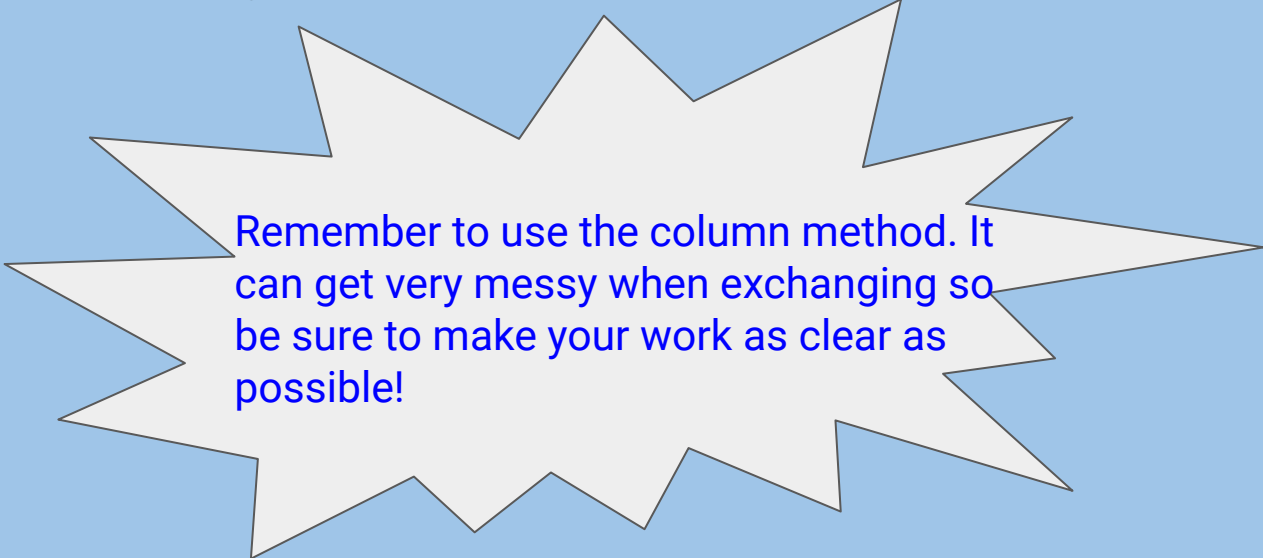
$6421 - 3158 =$

	Th	H	T	O
	6	³ 4	¹ 2	¹ 1
-	3	1	5	8
	3	2	6	3

Activity:

Complete the subtraction questions.

You **MUST** show all of your working out!



Remember to use the column method. It can get very messy when exchanging so be sure to make your work as clear as possible!