

Summer week 2

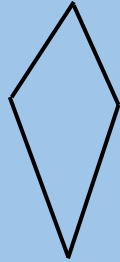
Lesson 2

Can I subtract with 3 digits
and word problems?

Fast Five - answers are on the next slide!

1) What is double 45?

2) What is the name of this quadrilateral?



3) $7 \times 500 =$

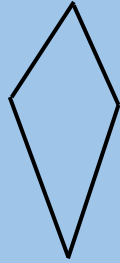
4) $20 \times 30 =$

5) Mully is hiding behind the largest multiple of 6 without going past 43. Where is Mully?

Fast Five - answers

1) What is double 45? **90**

2) What is the name of this quadrilateral? **Kite**



3) $7 \times 500 =$ **3500**

4) $20 \times 30 =$ **600**

5) Mully is hiding behind the largest multiple of 6 without going past 43. Where is Mully? **42**

When subtracting with 3 digits, we use the same method as we do for addition... column method! Except we are subtracting!

$469 - 312 =$

	Th	H	T	O
		4	6	9
-		3	1	2

When subtracting with 3 digits, we use the same method as we do for addition... column method! Except we are subtracting!

$$469 - 312 =$$

Once the numbers are in the correct positions, we subtract the numbers in each column!

	Th	H	T	O
		4	6	9
-		3	1	2

When subtracting with 3 digits, we use the same method as we do for addition... column method! Except we are subtracting!

$469 - 312 =$

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

$9 - 2 = 7$

When subtracting with 3 digits, we use the same method as we do for addition... column method! Except we are subtracting!

$469 - 312 =$

	Th	H	T	O
-		4 3	6 1	9 2
			5	7

$60 - 10 = 50$

When subtracting with 3 digits, we use the same method as we do for addition... column method! Except we are subtracting!

$$469 - 312 = 157$$

	Th	H	T	O
-		4	6	9
		3	1	2
		1	5	7

$$400 - 300 = 100$$

When subtracting with 3 digits, we use the same method as we do for addition... column method! Except we are subtracting!

$$648 - 213 =$$

Once the numbers are in the correct positions, we subtract the numbers in each column!

	Th	H	T	O
		6	4	8
-		2	1	3

When subtracting with 3 digits, we use the same method as we do for addition... column method! Except we are subtracting!

648 - 213 =

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

8 - 3 = 5

When subtracting with 3 digits, we use the same method as we do for addition... column method! Except we are subtracting!

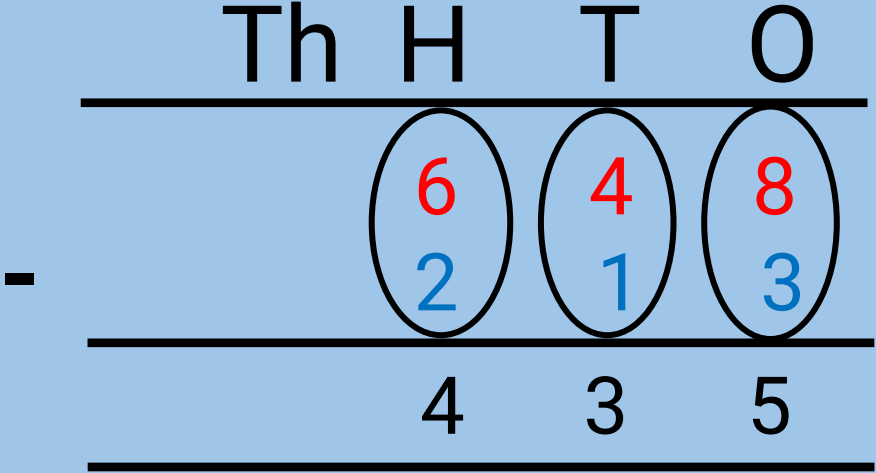
648 - 213 =

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

40 - 10 = 30

When subtracting with 3 digits, we use the same method as we do for addition... column method! Except we are subtracting!

$$648 - 213 = 435$$



$$600 - 200 = 400$$

On scrap paper or the back of your book try this question! The answer is on the next slide!

$793 - 303 =$

	Th	H	T	O
		7	9	3
-		3	0	3

On scrap paper or the back of your book try this question! The answer is on the next slide!

$$793 - 303 = 490$$

$$3 - 3 = 0$$

$$90 - 0 = 90$$

$$700 - 300 = 400$$

Th	H	T	O
	7	9	3
-	3	0	3
	4	9	0

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

$652 - 217 =$

	Th	H	T	O
		6	5	2
-		2	1	7

$2 - 7 =$

$2 - 7 =$

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	5	2
-		2	1	7

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

And add the 10 onto
the 2 to make 12.

$$12 - 7 = 5$$

Th	H	T	0
	6	4 5	12
-	2	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

$$40 - 10 = 30$$

Th	H	T	O
	6	4 5	¹ 2
	2	1	7
		3	5

$$652 - 217 = 435$$

$$6 - 2 = 4$$

-

Th	H	T	O
	6	5	¹ 2
	2	1	7
	4	3	5

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

$421 - 294 =$

	Th	H	T	O
		4	2	1
-		2	9	4

4 is larger than 1, so we need to exchange from the next column along, the tens column.

We take 1 ten (10 ones) from the 20, which leaves 10.

And add the 10 onto the 1 to make 11.

So $1 - 4 \longrightarrow 11 - 4 = 7$

Th	H	T	O
	4	2	11
-	2	9	4
			7

We take **1** hundred (10 tens) from the **400**, which leaves **300**.

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

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

9 is larger than 1, so we need to exchange from the next column along, the tens column.

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

Be sure to be subtracting with the new exchanged numbers, not the original ones!

$$3 - 2 = 1$$

	Th	H	T	O
		3	4	11
		1	2	11
-		2	9	4
		1	2	7

$$421 - 294 = 127$$

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

On scrap paper or the back of your book try this question! The answer is on the next slide!

$631 - 358 =$

	Th	H	T	O
		6	3	1
-		3	5	8

$$631 - 358 = 273$$

	Th	H	T	O
		5 6	1 2 3	1
-		3	5	8
		2	7	3

On scrap paper or the back of your book try this question! The answer is on the next slide!

$507 - 336 =$

	Th	H	T	O
		5	0	7
-		3	3	6

$$507 - 336 = 171$$

	Th	H	T	O
		4 5	10	7
-		3	3	6
		1	7	1

Try a word problem on scrap paper or the back of your book! The answer is on the next slide!

Pom has 450 rocks. He gave his friend 290 rocks. How many rocks does Pim have now?

$$\begin{array}{r} \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\ \hline \quad \quad 4 \quad 5 \quad 0 \\ - \quad \quad 2 \quad 9 \quad 0 \\ \hline \\ \hline \end{array}$$

Try a word problem on scrap paper or the back of your book! The answer is on the next slide!

Pom has 450 rocks. He gave his friend 290 rocks. How many rocks does Pim have now?

$$\begin{array}{r} \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\ \hline \quad 4 \quad 5 \quad 0 \\ - \quad 2 \quad 9 \quad 0 \\ \hline \quad 1 \quad 6 \quad 0 \\ \hline \end{array}$$

A vertical subtraction problem is shown with four columns labeled Th, H, T, and O. A horizontal line is drawn below the numbers. The top number is 450, and the bottom number is 290. A minus sign is placed to the left of the 290. The result 160 is shown below a second horizontal line. The digit 4 in the top number has a purple '3' written above it and a yellow diagonal line through it. The digit 5 in the top number has a yellow '1' written above it. The digit 0 in the top number has a red '0' written to its right. The digit 2 in the bottom number has a blue '2' written below it. The digit 9 in the bottom number has a blue '9' written below it. The digit 0 in the bottom number has a blue '0' written below it. The digit 1 in the result has a blue '1' written below it. The digit 6 in the result has a blue '6' written below it. The digit 0 in the result has a blue '0' written below it.

Try a word problem on scrap paper or the back of your book! The answer is on the next slide!

Mully made a pile of 785 pieces of paper. He took away 291 pieces of paper from the pile. How many are in the pile now?

Th H T O

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Try a word problem on scrap paper or the back of your book! The answer is on the next slide!

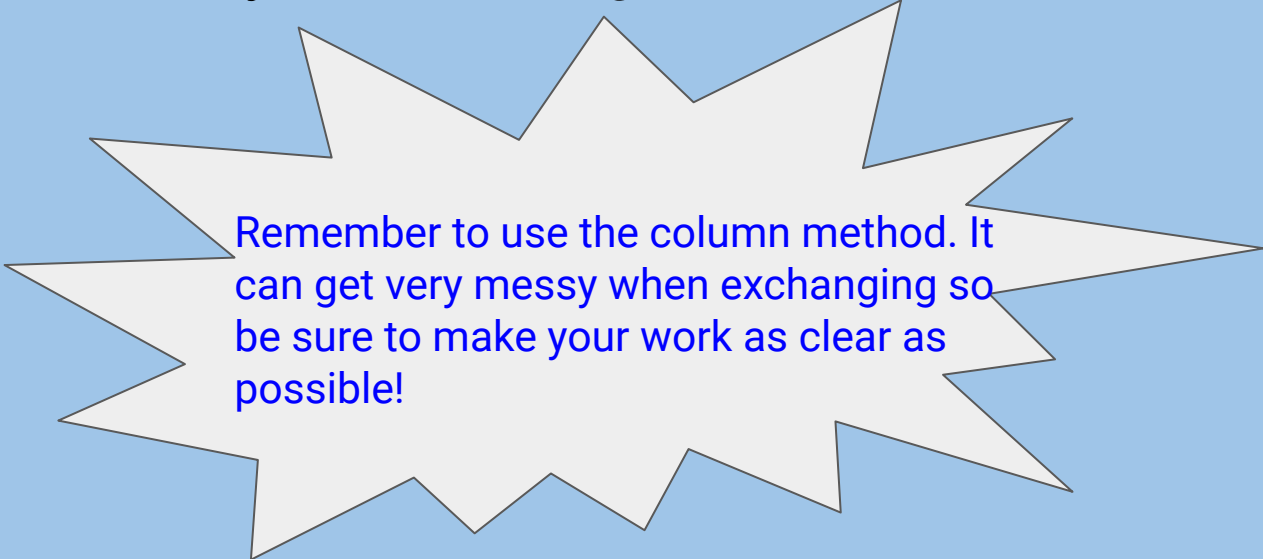
Mully made a pile of 785 pieces of paper. He took away 291 pieces of paper from the pile. How many are in the pile now?

$$\begin{array}{r} \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\ \hline \quad \quad 6\cancel{7} \quad 18 \quad 5 \\ - \quad \quad 2 \quad 9 \quad 1 \\ \hline \quad \quad 4 \quad 9 \quad 4 \\ \hline \end{array}$$

Activity:

Complete the subtraction questions in your books.

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!