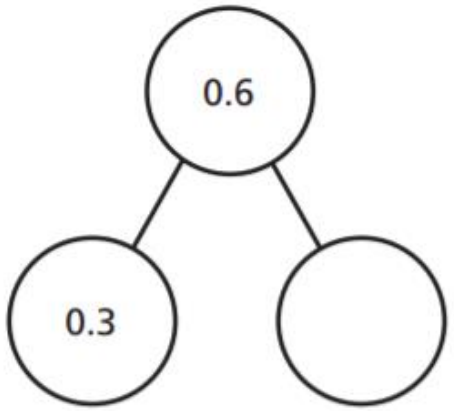
09:30 – 10:30
Mathematics: Year 5 Subtracting Decimals within 1

Monday 25th January 2021
25/01/2021

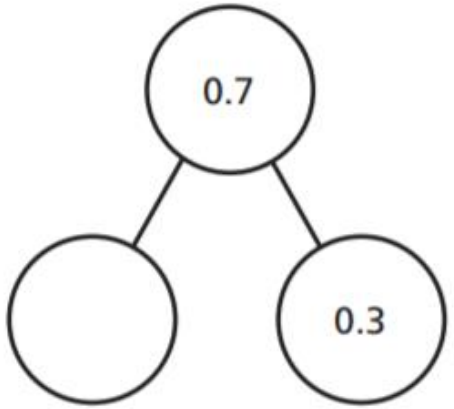
Let's get warmed up!

Complete the part-whole models.

a)



b)



09:30 – 10:30
Mathematics: Year 5 Subtracting Decimals within 1

Monday 25th January 2021
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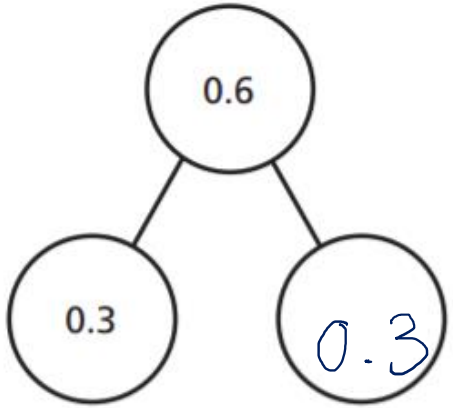
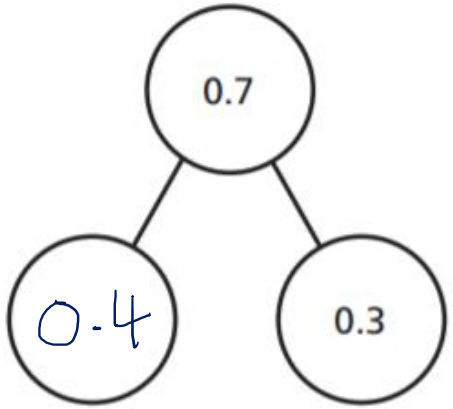
Let's get warmed up! Answers

Complete the part-whole models.

a)

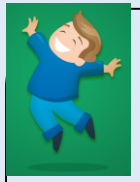


b)



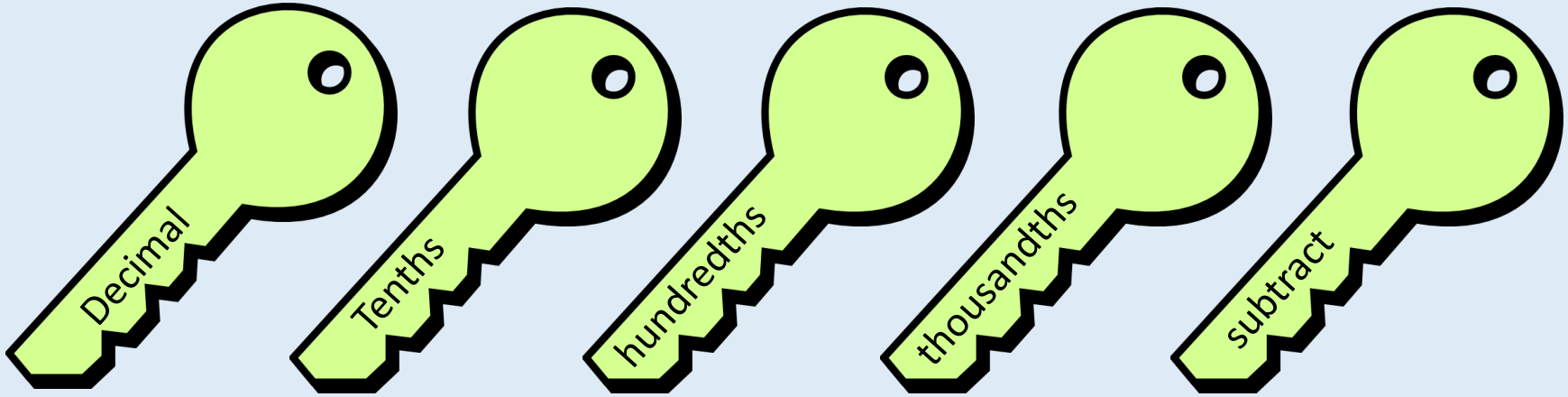
Subtracting Decimals within 1

LO: I can subtract decimals using a variety of methods.



How will you know that you have been successful?
What am I looking for?

You will be able to identify the value of each digit in a decimal number up to 3 decimal places
You will be able to use place value counters on a place value grid to subtract decimals
You will be able to use your knowledge of exchange to subtract decimals efficiently



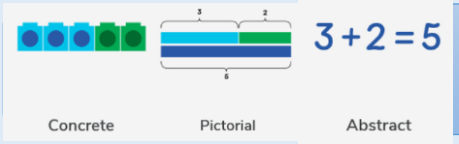
Stem sentence

There are _____ hundredths.

____ tenths/hundredths are

subtracted.

_____ subtract _____equals ____



Activating Prior Learning

We can be flexible with our knowledge of place value.

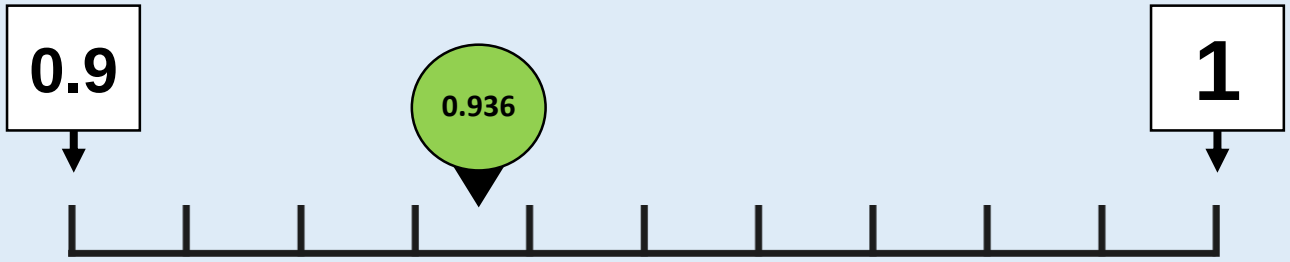
ones	tenths	hundredths	thousandths
0	9	3	6

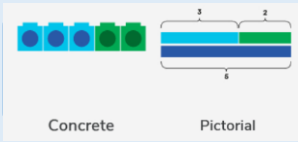
0.936 = 9 tenths, 3 hundredths and 6 thousandths

0.936 also = 93 hundredths and 6 thousandths

0.936 also = 936 thousandths

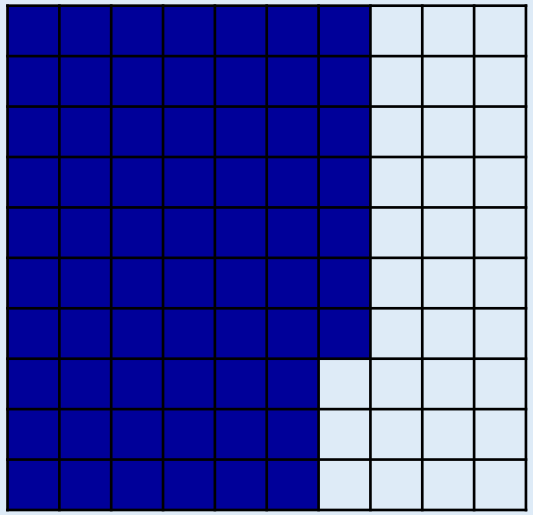
Ones	Tenths	Hundredths	Thousandths
0	9	3	6





Activating Prior Knowledge:

Ones	Tenths	Hundredths
0	6	7



What number is represented here?

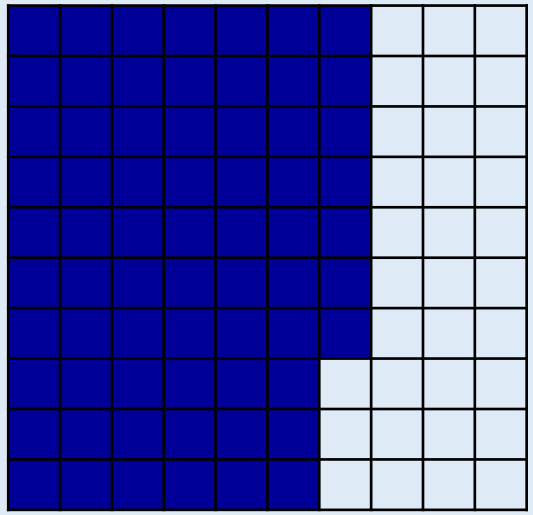
There are 6 tenths and 7 hundredths.

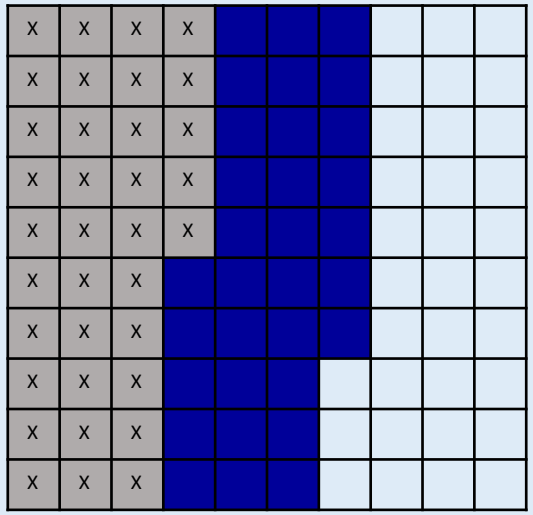
There are 67 hundredths

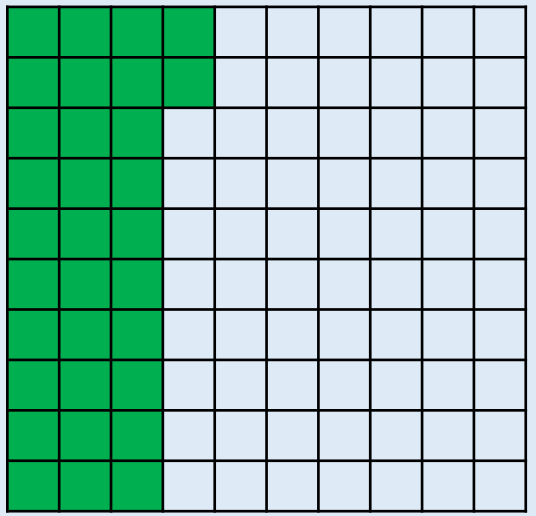
Concrete Pictorial

New Learning:

We are going to subtract 35 hundredths, or 0.35.







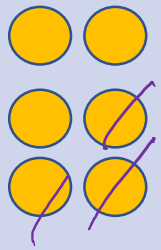
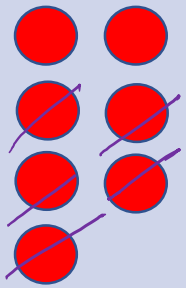
0.67 − 0.35 = 0.32

$$\begin{array}{r} 0.67 \\ -\ 0.35 \\ \hline 0.32 \end{array}$$

New Learning:

We are going to subtract 35 hundredths, or 0.35.

Concrete | Pictorial | Abstract

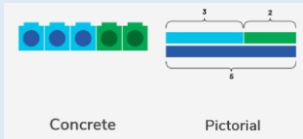
Ones	Tenths	Hundredths
		
0	6	7
0 .	3	2

	O	tth	hth
	0	6	7
-	0	3	5
	0	3	2

Stem sentence

There are 67 hundredths. 35 hundredths are subtracted.

0.67 subtract 0.35 equals 0.32

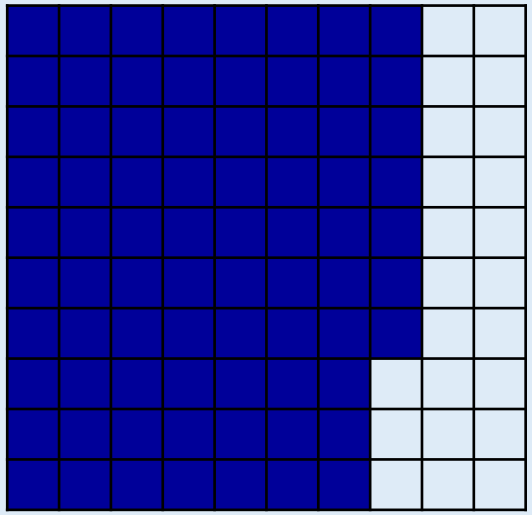


3+2=5

Abstract

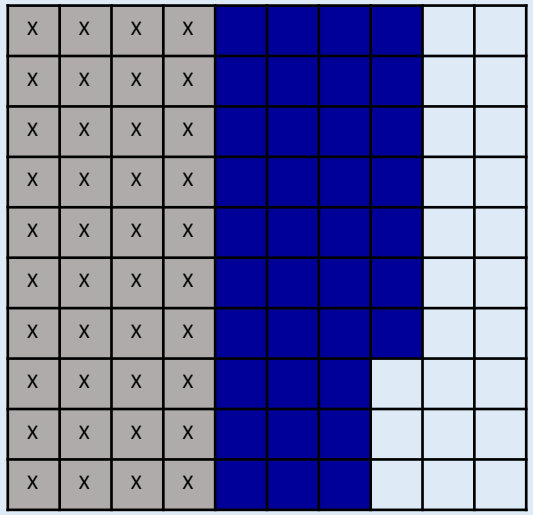
New Learning:

What calculation is represented here? Can you use the stem sentence to describe the calculation that is represented?



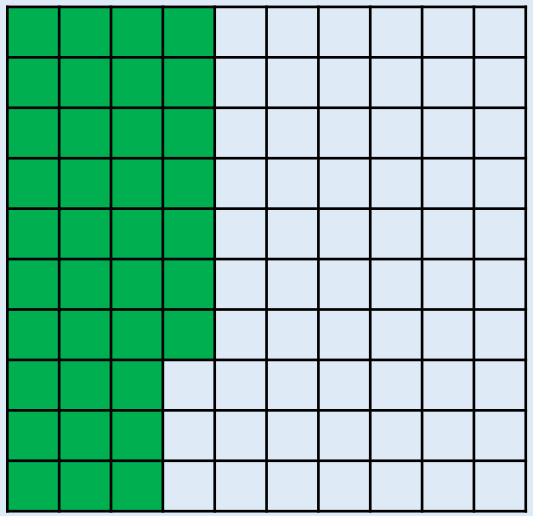
0.77

−



0.4

=



0.37

$$\begin{array}{r} 0.77 \\ -\,0.40 \\ \hline 0.37 \end{array}$$

There are 77 *hundredths.* 4 *tenths are subtracted.*

0.77 *subtract* 0.4 *equals* 0.37

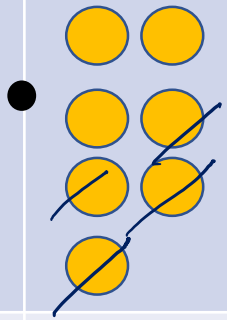
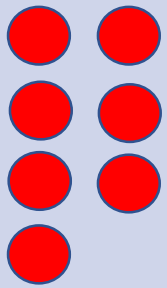
Concrete Pictorial

New Learning:

We are going to subtract 4 tenths, or 0.4.

Abstract

3 + 2 = 5

Ones	Tenths	Hundredths
		
0	7	7
0 .	3	7

	O	tth	hth
	0	7	7
-	0	4	0
	0	3	7

Stem sentence

There are 77 hundredths. 4 tenths are subtracted.

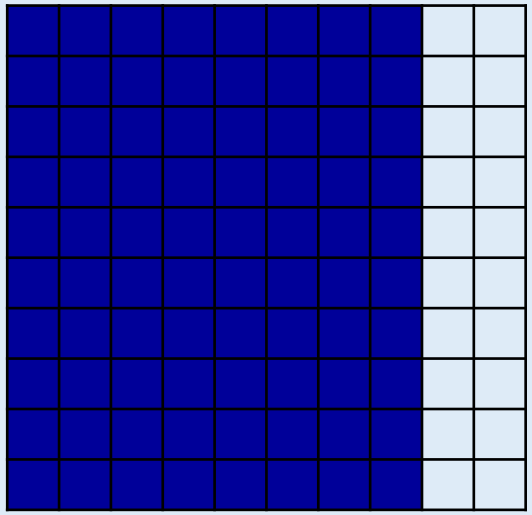
0.77 subtract 0.4 equals 0.37

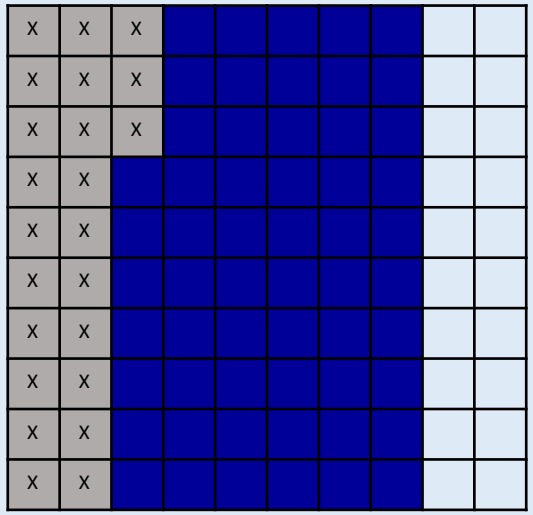
Practice:

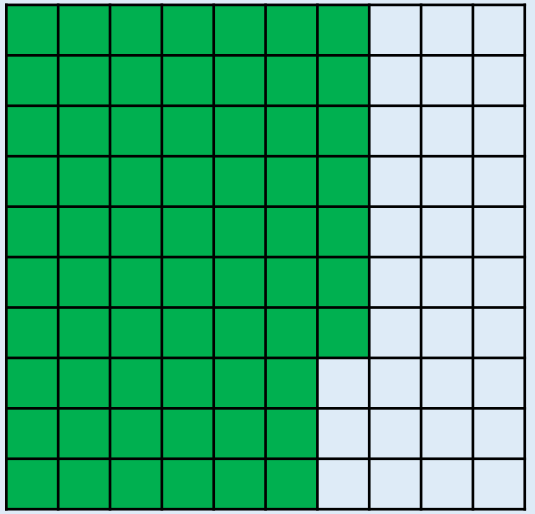
What calculation is represented here? Can you use the stem sentence to describe the calculation that is represented?

$3+2=5$

Abstract



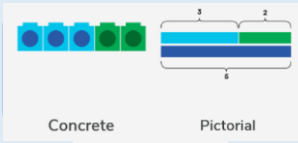




0.8 − 0.23 = 0.67

There are 80 *hundredths.* 23 *hundredths are subtracted.*

0.8 *subtract* 0.23 *equals* 0.67



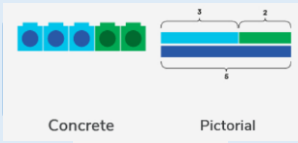
New Learning:

We can also use a place value chart to complete this calculation.
Model the number 0.8. We are going to subtract 0.23.
What do you think we need to do?

Ones	Tenths	Hundredths
0	8	0

− 0.23

− 0 . 2 3

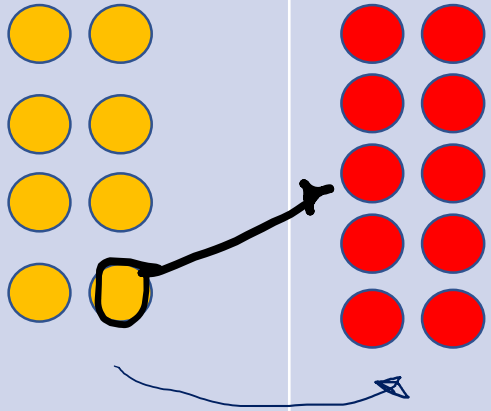


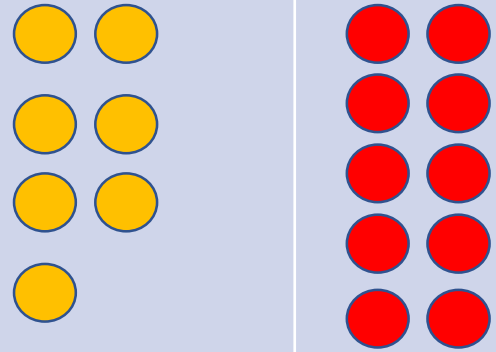
$3+2=5$

Abstract

New Learning:

We can also use a place value chart to complete this calculation.
Model the number 0.8. We are going to subtract 0.23.
What do you think we need to do?

Ones	Tenths	Hundredths
		
0	8	0
0	2	3

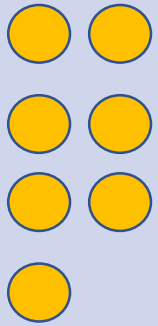
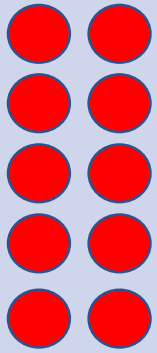
Ones	Tenths	Hundredths
		
0	7 8	10
0 .	2	3
0 .	5	7

3 + 2 = 5

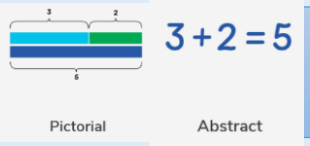
Abstract

New Learning:

We can record this as a calculation using the column method:

Ones	Tenths	Hundredths
		
0	7 8	1 0
0 .	2	3

	O	tth	hth
	0	7 8	1 0
-	0	2	3
	0	5	7



Independent Learning:

Complete the rest of the questions for this lesson.

Section 1 - No exchange

For each question, record your working pictorially, use the stem sentence and then write the column addition.

1 **0.77 – 0.24 =**

2 **0.58 – 0.4 =**

3 **0.98 – 0.24 =**

4 **0.64 – 0.34 =**

5 **0.48 – 0.2 =**

Section 2

For each question, record your working pictorially, use the stem sentence and then write the column addition.

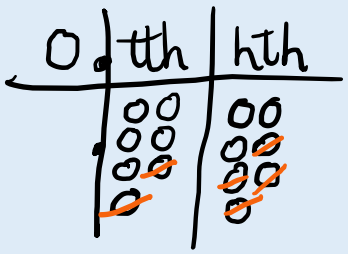
1 **0.52 – 0.37 =**

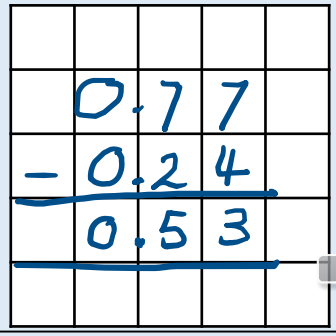
2 **0.9 – 0.52 =**

3 **0.43 – 0.28 =**

4 **0.8 – 0.39 =**

5 **0.71 – 0.08 =**



Example of recording (Section 1, Question 1)

There are 77 hundredths.
24 hundredths are subtracted.
0.77 − 0.24 = 0.53