

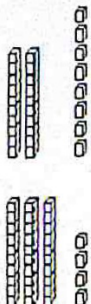
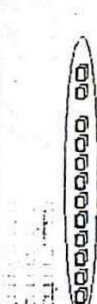
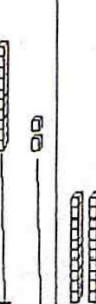
S.L.O.T. booklet 6.NS.B.2

**Fluently add, subtract, multiply
and divide multi-digit numbers
using standard algorithm.**

**Problems are written horizontally. Students
are to write them vertically. On page 2 of the
student work, the division problems are
written horizontally and the standard way, but
not on the next pages.**

**The red boxes can
be lifted to check
the solutions.**

When we add numbers we often have to combine more than one group. Below is an example of addition with regrouping.

			
$\begin{array}{r} 28 \\ + 34 \\ \hline \end{array}$	$\begin{array}{r} 28 \\ + 34 \\ \hline \end{array}$	$\begin{array}{r} 28 \\ + 34 \\ \hline 2 \end{array}$	$\begin{array}{r} 28 \\ + 34 \\ \hline 62 \end{array}$
Start by adding the ones. We have 12 ones but only one place!	We must regroup our 12 ones to give 1 ten and 2 ones	Now we can put the 1 ten with the tens and write 2 in the ones place	Finish by adding the tens including the 1 ten that was regrouped $2 + 3 + 1 = 6$

Example:

324

Yo
S
4 te

Steps to Subtract:

$941 - 528 =$			$\begin{array}{r} 311 \\ 94\cancel{1} \\ - 528 \\ \hline 413 \end{array}$
Step 1 Subtract the ones. You can't subtract 1 - 8 So, you must regroup 4 tens as 3 tens & 10 ones $\begin{array}{r} 311 \\ 94\cancel{1} \\ - 528 \\ \hline 413 \end{array}$	Step 2 Subtract the tens. 3 tens - 2 tens = 1 ten $\begin{array}{r} 311 \\ 94\cancel{1} \\ - 528 \\ \hline 413 \end{array}$	Step 3 Subtract the hundreds. 9 hundreds - 5 hundreds $\begin{array}{r} 311 \\ 94\cancel{1} \\ - 528 \\ \hline 413 \end{array}$	

Remember 	Subtract each column starting with the ones then....tens then....hundreds
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Example:

Steps to Multiply:

Step 1	Step 2	Step 3
Think of 25 as 2 tens 5 ones. Multiply by 5 in the ones place $\begin{array}{r} 3 \\ 26 \\ \times 25 \\ \hline 130 \end{array}$ ← 5 x 26	Multiply by 2 which is in the tens place, or 20 $\begin{array}{r} 1 \\ \cancel{3} \\ 26 \\ \times 25 \\ \hline 130 \\ 520 \end{array}$ ← 20 x 26	Add the products. $\begin{array}{r} 1 \\ \cancel{3} \\ 26 \\ \times 25 \\ \hline 130 \\ + 520 \\ \hline 650 \end{array}$

Example:

52

X 7

52

X 77

522

X 777

Quick review of terms:

$$\begin{array}{ccc}
 & 425 \div 25 & \\
 \swarrow & & \searrow \\
 \text{dividend} & & \text{divisor}
 \end{array}
 \qquad
 \begin{array}{r}
 \text{quotient} \\
 \hline
 \text{divisor} \overline{) \text{dividend}}
 \end{array}$$

- the number to be divided into is known as the **dividend**
- The number which divides the other number is known as the **divisor**

1 $3 \overline{)462}$	1 $3 \overline{)462}$	1 $3 \overline{)462}$	15 $3 \overline{)462}$	15 $3 \overline{)462}$	15 $3 \overline{)462}$	154 $3 \overline{)462}$
	-3	-3	-3	-3	-3	-3
	1	162	162	162	162	162
Step 1				-15	-15	-15
	Step 2			1	12	12
		Step 3				-12
			Step 4			0
				Step 5		
					Step 6	
						Step 7

Example:

$$25 \overline{)425}$$

①

Add

$257 + 821$

$$\begin{array}{r} 257 \\ + 821 \\ \hline \end{array}$$

$402 + 87$

Multiply

②

123×85

421×74

Subtract

$483 - 221$

$481 - 399$

Divide

$5,124 \div 6$

$$6 \overline{) 5,124}$$

$434 \div 7$

$$7 \overline{) 434}$$

3

Add

$$3,127 + 421 \quad 318 + 1,240$$

Multiply

4

$$94 \times 123 \quad 376 \times 85$$

Subtract

$$4,006 - 87 \quad 452 - 121$$

Divide

$$3,195 \div 9 \quad 5,272 \div 8$$

5

Add

$$9,125 + 82$$

$$471 + 2,810$$

Multiply

6

$$251 \times 23$$

$$618 \times 214$$

Subtract

$$605 - 87$$

$$715 - 53$$

Divide

$$5,376 \div 6$$

$$520 \div 8$$

⑦

Add

$$2,003 + 105$$

$$385 + 199$$

Multiply

⑧

$$601 \times 50$$

$$72 \times 84$$

Subtract

$$408 - 77$$

$$604 - 25$$

Divide

$$420 \div 15$$

$$1,564 \div 23$$

9

Add

$403 + 107$

$421 + 3,876$

Multiply

10

507×63

125×102

Subtract

$704 - 72$

$305 - 117$

Divide

$1,530 \div 15$

$848 \div 8$

11

Add

$$657 + 241$$

$$7,399 + 2,011$$

Multiply

12

$$5,007 \times 63$$

$$9,089 \times 24$$

Subtract

$$204 - 18$$

$$427 - 388$$

Divide

$$2,736 \div 9$$

$$16,024 \div 8$$

13

Add

$$399 + 477 \quad | \quad 3,207 + 998$$

Multiply

14

$$1,020 \times 63 \quad | \quad 602 \times 102$$

Subtract

$$1,010 - 289 \quad | \quad 408 - 375$$

Divide

$$18,090 \div 9 \quad | \quad 7,021 \div 8$$

(15)

Add

$$3,334 + 706$$

$$717 + 491$$

Multiply

(16)

$$2,006 \times 75$$

$$909 \times 178$$

Subtract

$$4,094 - 128$$

$$527 - 198$$

Divide

$$2,460 \div 12$$

$$48,096 \div 8$$

17

Add

$$1,742 + 358$$

$$784 + 3,851$$

Multiply

18

$$707 \times 465$$

$$8,003 \times 986$$

Subtract

$$3,009 - 1,128$$

$$958 - 476$$

Divide

$$30,050 \div 5$$

$$42,018 \div 6$$

