## Session UTowhsheot

## Addition:

Smaller jumps on a numberline:


Take a larger jump on a numberline:


Making a ten to add:


Using Base 10 to add:


Moving on to column addition:

| $H$ | T | O |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |

Use the place value grid above to draw in the base 10 to solve:


Column Addition with larger numbers:
a.

$$
\begin{array}{r}
7447 \\
+2987 \\
\hline
\end{array}
$$

b.
$\square$

Column addition with decimals (use column addition - don't forget to line up the decimal points):
$83.12+0.00660=$
$0.06266+0.6=$

## Subtraction:

Take a larger jump on a numberline:


Moving on to column addition without regrouping:


Make the first number and move the second number down (subtract):
382-141 =
Column Subtraction (with regrouping and decimals):

$$
\begin{array}{rrr}
700 & 609 & 670 \\
-657 & -195 & -365 \\
\hline
\end{array}
$$

47.563
86.969

- 32.448
- 75.567


## Multiplication:

Counting in multiples:
3. Count on in multiples of 9 from 36 .
36
$\square$
$\square$

$\square$
$\square$
4. Count back in multiples of 7 from 70.


Arrays:
Directions: Color the array to find the product.

$3 \times 4=$ $\qquad$

$5 \times 5=$
$\qquad$
Short Multiplication:
1.

| 4,854 |
| ---: |
| $\times \quad 5$ |

2. 


$\qquad$
Long Multiplication:

| 529 | 279 | 300 |
| ---: | ---: | ---: |
| $\times 65$ | $\times 86$ |  |

3. $\begin{array}{r}4,547 \\ \times \quad 2 \\ \hline\end{array}$

Division:
Dividing by putting into groups:

1) How many groups of 8?

2) How many groups of 2?

Division using jumps on a numberline:

1) $20 \div 5=$ $\qquad$

2) $18 \div 9=$ $\qquad$


Short Division (bus stop method):

1. $2 \longdiv { 3 5 }$
2. $2 \longdiv { 5 9 }$
3. $2 \longdiv { 8 6 }$
4. $2 \longdiv { 4 9 }$

Long division:


| 43 | 97 |
| :--- | :--- |
| 86 | 194 |
| 129 | 291 |


| 172 | 388 |
| :--- | :--- |
| 215 | 485 |
| 258 | 582 |
| 301 | 679 |
|  | 776 |
|  | 873 |
|  | 970 |

$9 7 \longdiv { 8 8 2 7 }$


