## SmartMäthz

## Writing Numerical Expressions

Grade 5 Algebra Worksheet<br>Date:<br>$\qquad$<br>Name:<br>$\qquad$

## LET'S MAKE LEARNING FUN

1. For each written phrase, write a numerical expression, and then solve.

| Sentence | Numerical Expression | Solution |
| :--- | :--- | :--- |
| a. Forty times the sum of forty- <br> three and fifty-seven |  |  |
| b. Seven times the quotient of <br> five and seven |  |  |
| c. Divide the difference between <br> one thousand, three hundred, and <br> nine hundred and fifty by four |  |  |
| d. One-fourth the difference of <br> four-sixths and three-twelfths |  |  |

2. Write numerical expression for each of the statements below, then solve.
a. Four fifths of seven.
b. One-eighth the product of four and six.
3. Make this following number sentences true by using $<$, $>$, or $=$.
a. $\quad 6 \times 8.70$
$\square \quad 5 \times 3.46+7 \times 4.95$
b. $\quad 604$ tenths +3 tens +1 thousandth $\square$ 20.31
c. $\quad\left(5 \times \frac{1}{10}\right)+\left(7 \times \frac{1}{1000}\right)$
0.609

## SmartMäthz

## Writing Numerical Expressions

Grade 5 Algebra Answer Sheet

1. For each written phrase, write a numerical expression, and then solve.

| Sentence | Numerical Expression | Solution |
| :--- | :---: | :--- |
| a. Forty times the sum of forty- <br> three and fifty-seven | $40 \times(43+57)$ | 4,000 |
| b. Seven times the quotient of <br> five and seven | $7 \times \frac{5}{7}$ | 5 |
| c. Divide the difference between <br> one thousand, three hundred, and <br> nine hundred and fifty by four | $\frac{1300-950}{4}$ | $87 \frac{1}{2}$ |
| d. One-fourth the difference of <br> four-sixths and three-twelfths | $\frac{1}{4} \times\left(\frac{4}{6}-\frac{3}{12}\right)$ | $\frac{5}{48}$ |

2. Write numerical expression for each of the statements below, then solve.
a. Four fifths of seven.

Numerical Expression:
$\frac{4}{5}$ of 7

## Solution:

$$
\frac{4}{5} \text { of } 7=\frac{4}{5} \times 7=\frac{4 \times 7}{5}=\frac{28}{5}=5 \frac{3}{5}
$$

b. One-eighth the product of four and six.

Numerical Expression:
$\frac{1}{8} \times(4 \times 6)$
Solution:
$\frac{1}{8} \times(4 \times 6)=\frac{1}{8} \times(24)=\frac{1 \times 24}{8}=\frac{24}{8}=3$
3. Make this following number sentences true by using $<,>$, or $=$.

$$
\text { a. } 6 \times 8.70 \quad \square \quad 5 \times 3.46+7 \times 4.95
$$

## Workings:

$6 \times 8.70=52.2$

Using the rule of BODMAS,
$5 \times 3.46+7 \times 4.95=(5 \times 3.46)+(7 \times 4.95)=(17.3)=(7 \times 4.95)=51.95$

Since 52.2 is greater than 51.95 .
Then, 52.2 $\qquad$ 51.95.

So that, $\quad 6 \times 8.70$ $\square$ $5 \times 3.46+7 \times 4.95$
b. 4 tenths +3 tens +1 thousandth $\quad \square \quad 20.31$

## Workings:

4 tenths +3 tens +1 thousandth $=3.401$
Since, 3.401 is less than 20.31 .
Then, $3.401 \quad<20.31$.
So that, $\quad 4$ tenths +3 tens +1 thousandth $\quad \square<20.31$
c. $\left(5 \times \frac{1}{10}\right)+\left(7 \times \frac{1}{1000}\right) \quad \square<0.609$

## Workings:

$\left(5 \times \frac{1}{10}\right)+\left(7 \times \frac{1}{1000}\right)=\frac{5}{10}+\frac{7}{1000}=\frac{500+7}{1000}=\frac{507}{1000}=0.507$
But, 0.507 is less than 0.609 .
Thus, 0.507
0.609

