

Name: _____

Unit 1 – Numeracy Skills

1.3 – Multiplication & Division

Multiplication

When we multiply numbers together, we use the following procedure:

1. line up numbers starting from the **right** hand side
2. multiply the first two numbers on the right together
3. write the **ones** part of the number below the line
4. carry the **tens** part of the number to the top of the next column
5. multiply the next two numbers together and then add on the carried number, etc.
6. remember to insert a **ZERO** to start the second row and repeat steps 1 to 5
7. add the two rows together to come up with the final answer

Examples: 2385×3

$$\begin{array}{r} 1 2 1 \\ 2385 \\ \times \quad 3 \\ \hline 7155 \end{array}$$

58×93

$$\begin{array}{r} 7 \\ 2 \\ 58 \\ \times \quad 93 \\ \hline 174 \\ + \underline{5220} \\ 5394 \end{array}$$

Try the following:

1. 1296×5

2. 47×24

3. 8645×29

Division

We need to know our multiplication facts in order to be able to divide numbers. Use the following procedure when dividing two numbers:

1. put the number **AFTER** the \div symbol on the **OUTSIDE** of the division bracket.
2. put the number **BEFORE** the \div symbol on the **INSIDE** of the division bracket.
3. determine how many times the OUTSIDE number goes into the INSIDE number starting with the digits from the **left** side of the INSIDE number
NOTE: you may sometimes have to use groups of two digits from the INSIDE number.
4. subtract the numbers from each other.
5. Bring down the next digit from the INSIDE number and repeat steps #3 and #4
6. continue until you cannot bring down any more digits from the INSIDE number

Examples: $479 \div 3$

$$\begin{array}{r} 159 \\ 3 \overline{)479} \\ \underline{-3} \\ 17 \\ \underline{-15} \\ 29 \\ \underline{-27} \\ 2 \end{array}$$

3 Times Table	
$3 \times 1 = 3$	
$3 \times 2 = 6$	
$3 \times 3 = 9$	
$3 \times 4 = 12$	
$3 \times 5 = 15$	
$3 \times 6 = 18$	
$3 \times 7 = 21$	
$3 \times 8 = 24$	
$3 \times 9 = 27$	

$2493 \div 7$

$$\begin{array}{r} 356 \\ 7 \overline{)2493} \\ \underline{-21} \\ 39 \\ \underline{-35} \\ 43 \\ \underline{-42} \\ 1 \end{array}$$

7 Times Table	
$7 \times 1 = 7$	
$7 \times 2 = 14$	
$7 \times 3 = 21$	
$7 \times 4 = 28$	
$7 \times 5 = 35$	
$7 \times 6 = 42$	
$7 \times 7 = 49$	
$7 \times 8 = 56$	
$7 \times 9 = 63$	

Try the following:

1. $538 \div 5$

2. $6104 \div 4$

3. $1937 \div 6$

Assignment

1. Multiply the following:

$$\begin{array}{r} \text{a.} \quad 5 \ 7 \ 9 \ 3 \\ \times \quad \underline{3 \ 5} \end{array}$$

$$\begin{array}{r} \text{b.} \quad 7 \ 2 \ 0 \ 4 \\ \times \quad \underline{4 \ 7} \end{array}$$

$$\begin{array}{r} \text{c.} \quad 9 \ 2 \ 3 \ 6 \\ \times \quad \underline{5 \ 9} \end{array}$$

$$\begin{array}{r} \text{d.} \quad 8 \ 3 \ 5 \ 1 \\ \times \quad \underline{8 \ 2} \end{array}$$

$$\begin{array}{r} \text{e.} \quad 9 \ 3 \ 0 \ 9 \\ \times \quad \underline{2 \ 6} \end{array}$$

$$\begin{array}{r} \text{f.} \quad 8 \ 8 \ 4 \ 2 \\ \times \quad \underline{7 \ 3} \end{array}$$

$$\begin{array}{r} \text{g.} \quad 7 \ 1 \ 3 \ 6 \\ \times \quad \underline{8 \ 5} \end{array}$$

$$\begin{array}{r} \text{h.} \quad 7 \ 2 \ 9 \ 4 \\ \times \quad \underline{4 \ 4} \end{array}$$

2. Divide the following:

$$\text{a.} \quad 4 \overline{)5823}$$

$$\text{b.} \quad 7 \overline{)9843}$$

$$\text{c.} \quad 9 \overline{)2873}$$

$$\text{d.} \quad 6 \overline{)5196}$$