

**Basic Arithmetic**  
**Skill-BUILDER # W – 7B**  
**Multiplying Whole Numbers with Trailing Zeros**

When multiplying whole numbers with trailing zeros (zeros at the end of the number), there is no need to put the zeros when performing the multiplication – simply add the zeros after multiplying the nonzero digits.

Examples

1.  $20 \times 300 \times 4,000$

Solution:

Multiply  $2 \times 3 \times 4$  to get  $6 \times 4$  which gives 24.

There are  $1 + 2 + 3 = 6$  trailing zeros; put these 6 zeros after 4.

Thus, the product is 24,000,000.

2.  $300 \times 20 \times 10,000 \times 100$

Solution:

Multiply  $3 \times 2 \times 1 \times 1$  to get 6.

There are  $2 + 1 + 4 + 2 = 9$  trailing zeros; put these 9 zeros after 6.

Thus, the product is 6,000,000,000.

3.  $102,000 \times 30,000$

Solution:

Multiply 102 by 3.

$$\begin{array}{r} 102 \\ \times 3 \\ \hline 306 \end{array}$$

There are  $3 + 4 = 7$  trailing zeros; put these after the 6 to get 3,060,000,000.

4.  $60,013,000 \times 100,200$

Solution:

Multiply 60,013 by 1002.

$$\begin{array}{r} 60013 \\ \times 1002 \\ \hline 120026 \\ \underline{600130} \\ 6121326 \end{array}$$

There are  $3 + 2 = 5$  trailing zeros and thus the product is 612,132,600,000.

**Basic Arithmetic**  
**Skill-BUILDER # W – 7B**  
**Multiplying Whole Numbers with Trailing Zeros**

Multiply.

1.  $100 \times 1,000 \times 10,000$

2.  $6,000 \times 20,000$

3.  $40 \times 5,000 \times 3,000,000$

4.  $30,700 \times 13,010,000$

5.  $10,010,000 \times 20,200$

**Basic Arithmetic**  
**Skill-Builder # W – 7B**  
**Multiplying Whole Numbers with Trailing Zeros**

**Answers**

1. 1,000,000,000
2. 120,000,000
3. 399,407,000,000
4. 202,202,000,000

Prepared by: Teresa V. Sutcliffe, Spring 2012