

Egyptian Multiplication Project

Today is your opportunity to take your knowledge of multiplication and show it off to the world. Most people do not know the steps the Egyptians used to multiply, but you are going to change that. This project will make it possible for you to explain the Egyptian multiplication method and compare it with other known methods.

In order for you to complete the project, you will need to complete each part.

Part 1:

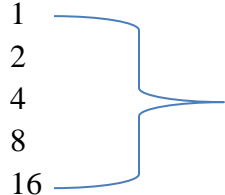
Write step by step directions explaining how to multiply. Each step should show the math involved.

Example:


Step 1 - The first step is to write both factors to be multiplied next to each other.

$$\begin{array}{r} 23 \\ \hline 21 \end{array}$$

Step 2 - The next step is to find the products of the powers of 2 that are less than the first factor.

$\begin{array}{r} 23 \\ \hline 21 \end{array}$	Powers of 2						
$\begin{array}{l} 1 \\ 2 \\ 4 \\ 8 \\ 16 \end{array}$ 	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 5px;">$\frac{2^0}{1}$</td> <td style="border: 1px solid black; padding: 5px;">$\frac{2^1}{2}$</td> <td style="border: 1px solid black; padding: 5px;">$\frac{2^2}{4}$</td> <td style="border: 1px solid black; padding: 5px;">$\frac{2^3}{8}$</td> <td style="border: 1px solid black; padding: 5px;">$\frac{2^4}{16}$</td> <td style="border: 1px solid black; padding: 5px;">$\frac{2^5}{32}$</td> </tr> </table>	$\frac{2^0}{1}$	$\frac{2^1}{2}$	$\frac{2^2}{4}$	$\frac{2^3}{8}$	$\frac{2^4}{16}$	$\frac{2^5}{32}$
$\frac{2^0}{1}$	$\frac{2^1}{2}$	$\frac{2^2}{4}$	$\frac{2^3}{8}$	$\frac{2^4}{16}$	$\frac{2^5}{32}$		

Step 3 - The second factor should be doubled from the previous number.

$\begin{array}{r} 23 \\ \hline 21 \end{array}$	$\begin{array}{l} 21 \\ 42 \\ 84 \\ 168 \\ 336 \end{array}$ 	<p>The numbers in this column are doubled.</p>
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****This example should give you enough to help you get started.

Part 2: Part 2 you will create three multiplication problems and solve them using the Egyptian multiplication method. The problems must be double digit and the numbers cannot be less than 25.

Example: 26×89

Step 3: This step you will compare the Egyptian method, area model of multiplication, partial product algorithm, and the lattice method. You will explain at least two positive reasons for using each method and at least two negative reasons for not using each method.

Example:

Method	Positive	Negative
Egyptian	<ul style="list-style-type: none">• This method help understand the powers of 2•	<ul style="list-style-type: none">• This method can be tricky to understand•
Area Model		
Partial Product		
Lattice		

- The assignment should be written neatly and have well written sentences. All sentences must use proper grammar and spelling.
- If an assignment is turned with sloppy handwriting or full of eraser marks, I will have you rewrite the entire assignment.