

Name: _____

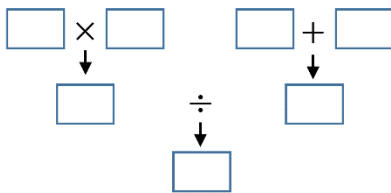
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1.6 Multiplying Integers Challenge Assignment:

Part A:

1. How many numbers between 10 to 100 can be made by multiplying any of the numbers from 1 to 12? Using each of the numbers from 1 to 12 once.

2. In the diagram, four different integers from 1 to 9 are placed in the four boxes in the top row. The integers in the left two boxes are multiplied and the two right boxes are added. The two values are then divided and the quotient is placed in the bottom box. If the number in the bottom box is 24, then what are the top four numbers.



Part B:

3. What are the values of “C”, “D”, and “E” so that the expression will be true?

$$\begin{array}{r} CDE \\ \times 3 \\ \hline EDC \end{array}$$

4. Two different 2-digit positive integers are called a “reversal pair” if the position of the digits in the first integer is switched in the second integer. For example 35 and 53 are a reversal pair. The integer 2015 is equal to the product of three prime numbers $13 \times 31 \times 7$, two of which are a reversal pair and also prime numbers. How many integers less than 10,000 are multiples of the product two primes that are reversal pairs?