

Cryptarithms

Overview: *Cryptarithms* are my absolute favorite type of brain workout. The basic idea is that the letters of a word really represent numbers, and you can figure out which letter equals which number by pure logic and a little guesswork.

Cryptarithms are a puzzle where the digits are replaced by letters or symbols.

When the numbers are replaced by letters of the alphabet and it spells something readable, it's called *Alphametics*.

Rules: Each letter represents a unique digit, numbers may not start with zero, and the solution is unique. A few weird things to remember are: stars substitute for any digit, and are not related to each other, dots stand for a decimal point, and lower case 'x' means multiplication.

$$\begin{array}{r}
 \text{S E N D} \\
 + \text{M O R E} \\
 \hline
 \text{M O N E Y}
 \end{array}$$

$$\begin{array}{r}
 9 5 6 7 \\
 + 1 0 8 5 \\
 \hline
 1 0 6 5 2
 \end{array}$$

Exercises:

DAD	SHORT	
HAD		NINA
A	SPOT	<u>+SING</u>
<u>+BAD</u>	A	AGAIN
HEAD	<u>+ TOP</u>	
	GHOST	THY
OOOH		<u>+HAY</u>
<u>+FOOD</u>	MEMO	MYTH
FIGHT	<u>+FROM</u>	
	HOMER	STARS
PEAR		<u>+RATE</u>
<u>+APPLE</u>	HERE	TREAT
GRAPE	<u>+ SHE</u>	
	COMES	
NO		
GUN		
<u>+NO</u>	OLD	
HUNT	OLD	
THIS	<u>+OLD</u>	
<u>+SIZE</u>	GOOD	