

## ROUND-ABOUT MATH PUZZLE #11

How many equations can you find in the grid below? The number squares must be connected, either vertically, horizontally, or diagonally. You may add signs and parentheses wherever needed. Do not use the same number square twice in one equation.

3	2	8	4
6	1	7	3
9	5	0	2

**10 equations:** Good start!

**20 equations:** Way to go!

**30 equations:** Great!

**40 equations:** Super!

(Extra rule for older kids: don't repeat equations which use exactly the same 3 numbers. For example, only one of these could be used:  $5 + 1 = 6$ ,  $1 + 5 = 6$ ,  $6 - 5 = 1$ , and  $6 - 1 = 5$ .)


## Answers to ROUND-ABOUT MATH #11

This is a list of some possible equations. It's not meant to be exhaustive.

$$\begin{aligned}6 \div 3 &= 2 \\5 + 7 &= 12 \\12 - 8 &= 4 \\3 + 7 &= 10 \\2 \times 7 &= 16 - 2 \\6 + 9 &= 15 \\(4 + 3) \times 7 + 1 &= 50 \\8 \times 2 &= 16 \\8 + 7 &= 15 \\4 + 7 &= 5 + 6 \\8 - 7 &= 1 \\3 - 2 &= 0 + 1 \\4 - 3 &= 0 + 1 \\6 - 2 + 10 &= 5 + 9 \\3 \times 7 &= 21 \\8 \times 4 &= 32 \\6 \times 9 &= 57 - 3 \\6 \times 2 &= 8 + 4 \\36 - 1 &= 5 \times 7 \\8 \times 7 &= 56 \\43 + 2 + 0 &= 5 \times 9 \\7 - 3 &= 4 \\6 - 5 - 1 &= 0 \\8 + 4 + 7 &= 19 \\3 + 2 + 8 &= 7 + 5 + 1\end{aligned}$$

$$\begin{aligned}4 \times 3 &= 7 + 5 \\28 \div 7 &= 4 \\3 \times 6 &= 18 \\6 + 3 &= 2 + 7 \\81 &= 9 \times (6 + 3) \\36 &= 9 \times (5 - 1) \\9 + 6 + 2 &= 17 \\50 &= (3 + 7) \times (2 + 3) \\8 \times 3 &= 4 \times (7 - 1) \\4 \times (8 \div 2) &= 16 \\31 &= (5 \times 7) - 4 \\8 - 3 &= 7 - 2 \\8 + (4 \times 3) &= 20 \\6 \times 3 &= 18 \\5 + 0 - 2 &= 3 \\7 - 1 &= 6 \\(6 + 5) \times 1 &= 8 + 3 \\30 \div 5 &= 6 \\6 + 2 + 1 &= 9 \\20 &= 5 + 9 + 6 \\(9 \times 6) + (2 \times 8) &= 70 \\(2 \times 7) + 5 &= 19 \\7 \times 1 \times 9 &= 63 \\3 \times 6 &= 1 + 2 + 8 + 7 \\(2 + 6) \times 10 &= (3 + 7) \times 8\end{aligned}$$