

The 1, 3, 4, 6 Challenge

Use the digits 1, 3, 4, and 6 to make every number from 1 to 24.

You must use each digit exactly once.

You can use addition, subtraction, multiplication, division, and parentheses.

For example: $1 = 1 \times (3 + 4 - 6)$ works, but $1 = 4 - 3$ doesn't work, since it doesn't include all the digits. And $1 = 6 \div 6$ doesn't use all the digits and it uses 6 twice, which isn't allowed either.

$$1 = 1 \times (3 + 4 - 6) \quad 7 =$$

$$2 = \quad 8 =$$

$$3 = \quad 9 =$$

$$4 = \quad 10 =$$

$$5 = \quad 11 =$$

$$6 = \quad 12 =$$

$13 =$

$22 =$

$14 =$

$23 =$

$15 =$

$24 =$

$16 =$

$17 =$

$18 =$

$19 =$

$20 =$

$21 =$