WORLD BOOK

Building Blocks of Math

Name:_____ Date:_____ Class:_____

Make 24!

Directions: Using only addition, subtraction, multiplication, and division, can you use each of the 4 numbers once, and only once, to get 24? The first example is done for you. BTW, there are many ways to do each problem – see how many you can find!

Some solutions for each problem are on the second sheet.

Example: 2, 3, 4, 6 One solution is: 3 - 2 = 1, 1 x 4 = 4, and 4 x 6 = 24Another solution is: 6 - 3 = 3, 3 x 4 = 12, and $12 \times 2 = 24$

1. 1, 2, 3, 4

2. 1, 2, 4, 6

3. 3, 4, 6, 8

4. 2, 3, 4, 6

5. 2, 3, 4, 4

6. 3, 4, 5, 5

7. 2, 4, 8, 8

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Possible solutions:

1. 1, 2, 3, 4	5. 2, 3, 4, 4
$1 \times 2 \times 3 \times 4 = 24$ (3 + 2 + 1) × 4 = 24	$(4 \times 4 \times 3) \div 2 = 24$ $(4 \div 2) \times 3 \times 4 = 24$
(4 ÷ 1) x 2 x 3 = 24	((2 + 3) x 4) + 4 = 24
2. 1, 2, 4, 6	6. 3, 4, 5, 5
(2 – 1) x 4 x 6 = 24	(5 x 5) + 3 – 4 = 24
(6 + 2) x (4 - 1) = 24	(3 x 5) + 4 + 5 = 24
(4 ÷ (2 – 1)) x 6 = 24	(3 + (5 x 5) - 4) = 24
3. 3, 4, 6, 8	7. 2, 4, 8, 8
(8 - 6) x 4 x 3 = 24	(2 x 4) + 8 + 8 = 24
(6 ÷ 3) x (4 + 8) = 24	((8 + 8) - 4) x 2 = 24
((3 x 4) - 8) x 6 = 24	(8 – 2) x (8 – 4) = 24
4. 2, 3, 4, 6	

 $(3 \times 4) + (2 \times 6) = 24$ $(3 \times 6) + 4 + 2 = 24$ $(6 + 4 - 2) \times 3 = 24$