

LESSON
1-3 **Challenge**
Multiplication and Division Puzzles

For puzzles 1 and 2, draw a path from the Start box to the Finish box, multiplying by each number along the way, to find a product equal to the goal number.

Moves must be vertical or horizontal only, and the path cannot cross itself. An example is shown at right. The path is correct because $2 \cdot 1 \cdot -3 \cdot -2 \cdot 1 \cdot 2 \cdot -2 = -48$.

Goal: Product of -48

3	-2	1
1	-3	2
2 Start	4	-2 Finish

1. Goal: Product of -8

-1	-1	2
2 Start	2	-1
-1	-2	-1 Finish

2. Goal: Product of 120

1	3	-2
-2	4	-1
-5 Start	-3	2 Finish

For puzzles 3 and 4, draw a path from the Start box to the Finish box, dividing by each number along the way, to find a quotient equal to the goal number. Moves must be vertical or horizontal only, and the path cannot cross itself.

3. Goal: Quotient of 1

-4	3	-2
-24 Start	3	2
1	2	-2 Finish

4. Goal: Quotient of -3

-36 Start	2	-3
3	-2	-3
4	2	-1 Finish