

Find the links

A route can be followed through the array of numbers from start to end. A route, which is made by linking sets of three numbers, does not cross itself. The link is a multiplication or division but *not* an addition or subtraction. Look at the example.

end	1	4	12	2
	3	3	3	6
	3	6	2	3
	8	2	4	2
				start

→ This is one route using four links:
 $2 \times 3 = 6$; $6 \times 2 = 12$; $12 \div 4 = 3$; $3 \div 3 = 1$

→ This is another route using three links:
 $4 \div 2 = 2$; $6 \div 2 = 3$; $3 \div 3 = 1$

The last number in a link is made by either dividing or multiplying the first two numbers. This last number then becomes one of the first two numbers in the next link.

- Find three routes through this array of numbers. Work out the number links and write each route in the space.

end	4	16	4	16
	3	10	2	4
	12	5	20	5
	6	2	8	4
				start

Route 1:

Route 2:

Route 3:

- Design an array of numbers of your own.

- Challenge a friend to find a route through it.