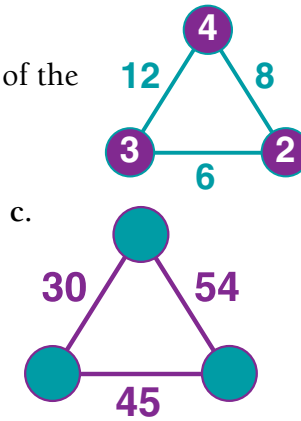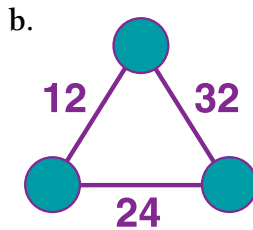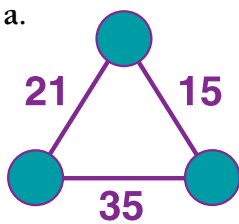# Factor Puzzles

You need ☑ 2 dice marked 4, 5, 6, 7, 8, and 9   ☑   a classmate
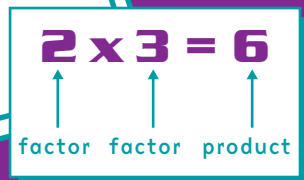☑ counters (a different colour for each player)

Activity

The number beside each line segment is the product of the factors in the circles at each end of the line segment.

1. Name the missing factors for these polygons:

a.

21   15
35

b.
12   32
24

c.
30   54
45

(example polygon top right)
4
12   8
3   2
6

$2 \times 3 = 6$

factor   factor   product

2. Make up some number polygons for a classmate to solve.

Game

Take turns to roll the dice.

On your turn, multiply the two numbers showing on the dice and cover with a counter any square on the board that shows the product.
Each number can only be covered by one counter.

The first player to cover three squares in a row (vertically, horizontally, or diagonally) wins.
If neither player ends up with three counters next to each other, the game is a draw.

36	45	54	63	72	81
35	40	42	48	56	20
24	28	32	16	63	30
40	48	25	28	45	36
54	72	35	42	56	24
32	64	49	20	30	72