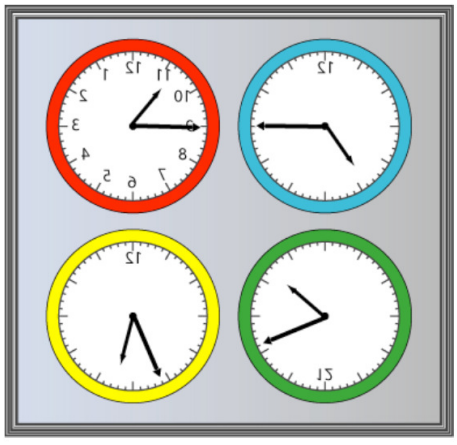
Nrich Maths Challenge posters

Samples

Clocks

These clocks have been reflected in a mirror.

What times do they say?



nrich.maths.org

Got It!

This is a game for two players.

Start with the target number of **23**.

The first player chooses a whole number from 1 to 4.

Players take turns to add a whole number from 1 to 4 to the running total.

The player who hits the target of 23 wins the game.

Can you find a winning strategy?
Can you always win?

What happens if you choose a new target number?

What happens if you change the range of numbers you can add?

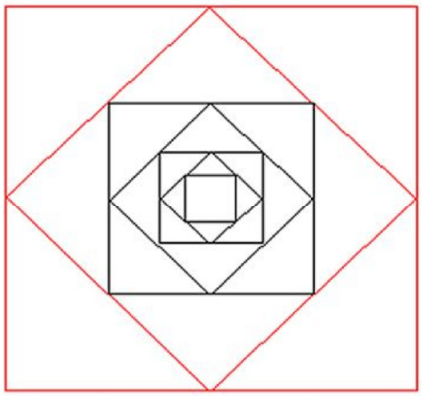
Can you work out a winning strategy for any target and any range of numbers?

nrich.maths.org

Inside Seven Squares

Seven squares are set inside each other. The centre points of each side of the outer square are joined to make a smaller square inside it, and so on.

The centre square has the area of one square unit. What is the total area of the four outside triangles that are outlined in red?



nrich.maths.org

Largest Product

$3 + 3 + 4 = 10$
$3 \times 3 \times 4 = 36$

$3.3 + 6.7 = 10$
$3.3 \times 6.7 = 22.11$

What is the greatest product that can be made from numbers that add up to 10?

$5 + 5 = 10$
$5 \times 5 = 25$

$1 + 9 = 10$
$1 \times 9 = 9$

$1 + 2 + 3 + 4 = 10$
$1 \times 2 \times 3 \times 4 = 24$

nrich.maths.org