



# Magic Number

I can calculate area and perimeter, given a measurement.



Your magic number is 24.

1. Find all squares and rectangles which have an area of  $24\text{cm}^2$ . Record here all the shapes you make and calculate each shape's perimeter. One has been done for you.

24cm

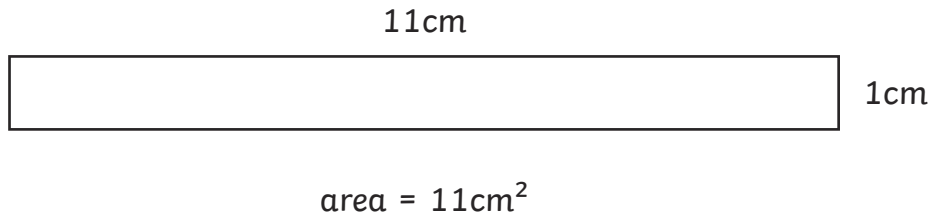


1cm

perimeter = 50cm



2. Find all squares and rectangles which have a perimeter of 24cm. Record here all the shapes you make and calculate each shape's area. One has been done for you.





# Magic Number

I can calculate area and perimeter, given a measurement.



Your magic number is 36.

1. Find all squares and rectangles which have an area of  $36\text{cm}^2$ . Record here all the shapes you make and calculate each shape's perimeter. One has been done for you.

36cm



1cm

perimeter = 74cm



2. Find all squares and rectangles which have a perimeter of 36cm. Record here all the shapes you make and calculate each shape's area. One has been done for you.

17cm



1cm

$$\text{area} = 17\text{cm}^2$$



# Magic Number

I can calculate area and perimeter, given a measurement.



Your magic number is 42.

1. Find all squares and rectangles which have an area of  $42\text{cm}^2$ . Record here all the shapes you make and calculate each shape's perimeter. One has been done for you.

42cm



1cm

perimeter = 86cm



2. Find all squares and rectangles which have a perimeter of 42cm. Record here all the shapes you make and calculate each shape's area. One has been done for you.

20cm



1cm

area =  $20\text{cm}^2$



# Magic Number Answers

1. Find all squares and rectangles which have an area of  $24\text{cm}^2$ . Record here all the shapes you make and calculate each shape's perimeter.

Shape Dimensions	Perimeter
$24\text{cm} \times 1\text{cm}$	50cm
$12\text{cm} \times 2\text{cm}$	28cm
$8\text{cm} \times 3\text{cm}$	22cm
$6\text{cm} \times 4\text{cm}$	20cm

2. Find all squares and rectangles which have a perimeter of 24cm. Record here all the shapes you make and calculate each shape's area.

Shape Dimensions	Area
$11\text{cm} \times 1\text{cm}$	$11\text{cm}^2$
$10\text{cm} \times 2\text{cm}$	$20\text{cm}^2$
$9\text{cm} \times 3\text{cm}$	$27\text{cm}^2$
$8\text{cm} \times 4\text{cm}$	$32\text{cm}^2$
$7\text{cm} \times 5\text{cm}$	$35\text{cm}^2$
$6\text{cm} \times 6\text{cm}$	$36\text{cm}^2$



# Magic Number Answers

1. Find all squares and rectangles which have an area of  $36\text{cm}^2$ . Record here all the shapes you make and calculate each shape's perimeter.

Shape Dimensions	Perimeter
$36\text{cm} \times 1\text{cm}$	$74\text{cm}$
$18\text{cm} \times 2\text{cm}$	$40\text{cm}$
$12\text{cm} \times 3\text{cm}$	$30\text{cm}$
$9\text{cm} \times 4\text{cm}$	$26\text{cm}$
$6\text{cm} \times 6\text{cm}$	$24\text{cm}$

2. Find all squares and rectangles which have a perimeter of  $36\text{cm}$ . Record here all the shapes you make and calculate each shape's area.

Shape Dimensions	Area
$17\text{cm} \times 1\text{cm}$	$17\text{cm}^2$
$16\text{cm} \times 2\text{cm}$	$32\text{cm}^2$
$15\text{cm} \times 3\text{cm}$	$45\text{cm}^2$
$14\text{cm} \times 4\text{cm}$	$56\text{cm}^2$
$13\text{cm} \times 5\text{cm}$	$65\text{cm}^2$
$12\text{cm} \times 6\text{cm}$	$72\text{cm}^2$
$11\text{cm} \times 7\text{cm}$	$77\text{cm}^2$
$10\text{cm} \times 8\text{cm}$	$80\text{cm}^2$
$9\text{cm} \times 9\text{cm}$	$81\text{cm}^2$





# Magic Number Answers

1. Find all squares and rectangles which have an area of  $42\text{cm}^2$ . Record here all the shapes you make and calculate each shape's perimeter.

Shape Dimensions	Perimeter
$42\text{cm} \times 1\text{cm}$	86cm
$21\text{cm} \times 2\text{cm}$	46cm
$14\text{cm} \times 3\text{cm}$	34cm
$7\text{cm} \times 6\text{cm}$	26cm

2. Find all squares and rectangles which have a perimeter of 42cm. Record here all the shapes you make and calculate each shape's area.

Shape Dimensions	Area
$20\text{cm} \times 1\text{cm}$	$20\text{cm}^2$
$19\text{cm} \times 2\text{cm}$	$38\text{cm}^2$
$18\text{cm} \times 3\text{cm}$	$54\text{cm}^2$
$17\text{cm} \times 4\text{cm}$	$68\text{cm}^2$
$16\text{cm} \times 5\text{cm}$	$80\text{cm}^2$
$15\text{cm} \times 6\text{cm}$	$90\text{cm}^2$
$14\text{cm} \times 7\text{cm}$	$98\text{cm}^2$
$13\text{cm} \times 8\text{cm}$	$104\text{cm}^2$
$12\text{cm} \times 9\text{cm}$	$108\text{cm}^2$
$11\text{cm} \times 10\text{cm}$	$110\text{cm}^2$