



# Gordon Burgin's Puzzles

## March 2022 challenge

### Calculate maze

Begin at the key marked 'START' and carry out the calculation as indicated. Once you have got that answer, find that corresponding number on a different key. On that different key calculate its answer and with this new number proceed to the next key. Continue on in this way until you eventually find a number that does not lead anywhere else. What is that final numbered key?

51 + 21	65 x 9/13	6 x 6.5	28 - 8	72 - 36	54 / 6
4 x 17	80 / 8/7	39 + 13	14 x 2/7	45 / 5/3	38 x 1.5
36 x 4/3	74 - 36	20 + 54	9 x 4/3	68 / 4/3	52 + 28
25 + 29	27 - 13	35 x 4/5	48 / 8	70 x 0.5	12 + 53

START

### Boxed in?

A shipping service restricts the dimensions of the boxes it will ship for a certain type of service. The restriction states that for rectangular boxes, the sum of the perimeter of the base of the box and the height of the box cannot exceed 130 inches. The perimeter of the base is determined using the width and length of the box. If a box has a height of 60 inches and its length is 2.5 times the width, what is the maximum width which is allowed for this box?

### What's the angle?

In the figure below,  $RT = TU$ . What is the value of  $x^\circ$ ?

