

Square numbers

The Busy Lizzie Maths Library

Square numbers

You will need the following digit cards.



Using the cards only once, how many square numbers can you make?

How many ways can you find?

What is the largest square number you can make?

Can you find 4 or 5 square numbers using the digit cards?

Thinking about this problem.

$2 \times 2 = 4$

$3 \times 3 = 9$

$4 \times 4 = 16$

$5 \times 5 = 25$

$6 \times 6 = 36$

$7 \times 7 = 49$

$8 \times 8 = 64$

$9 \times 9 = 81$

$10 \times 10 = 100$

If I am making square numbers to 10×10 , I cannot make 100, as I would need two zero cards.

I cannot make 5 two-digit numbers because, there are only 9 cards and the digit

1 appears twice

2 appears once

3 appears once

4 appears twice

6 appears three times

7 doesn't appear at all

8 appears once

9 appears twice

Possible solutions...

