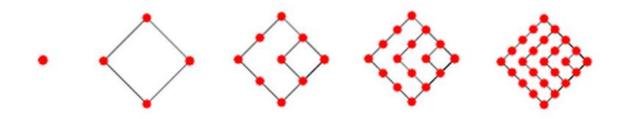


Square Number Surprises

You're probably very familiar with the Square Numbers:

1, 4, 9, 16, 25...



Below are some ideas to explore with square numbers. For each one, try a few examples and see what you notice.

- Add two consecutive square numbers and then subtract 1
- Square any odd number, then subtract 1
- Multiply two consecutive odd numbers and then add 1
- Multiply two consecutive odd numbers and then add 1

Can you explain what you've noticed? Can you prove that it will always happen?

Can you come up with any Square Number Surprises of your own?