

The diagram shows that 1 + 3 + 5 + 7 = 16.



What is the sum of the first  $30 \mbox{ odd}$  numbers?

What is the sum of the first  $60 \mbox{ odd numbers}?$ 

Can you describe a method for working these out quickly?

Can you make 3249 by adding odd numbers in this way?

What is the value of:

- 1+3+...+149+151+153?
- 83 + 81 + ... + 5 + 3 + 1?
- 51 + 53 + 55 + ... + 149 + 151 + 153?
- 2+4+...+150+152+154?
- 2+6+...+298+302+306?

Explain how you worked these out.