

## Reasoning — Is it always true?

Name: \_\_\_\_\_

Date: \_\_\_\_\_



Read each question and write what you work out.

1 The sum of five consecutive numbers is a multiple of 5.

**always**

sometimes

never

Why? There is no counter-example, and here is why: the middle one is the average of all five, so the total is five of it.

2 The difference between two square numbers in a row is odd.

always

sometimes

never

Why? .....

3 Add up some numbers in a row and the total is a multiple of how many you took.

always

sometimes

never

Why? .....

4 The sum of four consecutive numbers is a multiple of 4.

always

sometimes

never

Why? .....



## Reasoning · Is it always true? — Answer key



1. The sum of five consecutive numbers is a multiple of 5. → always

2. The difference between two square numbers in a row is odd. → always

3. Add up some numbers in a row and the total is a multiple of how many you took. → sometimes

4. The sum of four consecutive numbers is a multiple of 4. → never