Odd/even properties

6 questions | 9 marks

Equivalent correct methods earn the corresponding marks.

1. List the even numbers: 17, 28, 40, 53, 66. [1 mark]

Their ones digits are 8, 0 and 6.

Answer: 28, 40 and 66.

2. Is 7,205 odd or even? Give a reason. [1 mark]

The last digit determines the leftover after pairing.

Answer: Odd, because its ones digit is 5.

3. Complete the rule: $\text{even} + \text{even}$ is ____. [1 mark]

Joining two groups made entirely of pairs still gives complete pairs.

Answer: Even.

4. Without finding the exact total, classify $4{,}018 + 723$. [2 marks]

4,018 is even and 723 is odd.

$\text{Even} + \text{odd}$ is odd.

Answer: Odd.

5. Give two different odd numbers whose sum is 20. [2 marks]

Check that both numbers are odd and their sum is 20.

Answer: For example, 7 and 13. Other valid pairs include 1 and 19, 3 and 17, or 9 and 11.

6. A learner says $\text{odd} \times \text{odd}$ is always even. Use a calculation to disprove this and state the correct rule. [2 marks]

Both factors are odd, but 15 is odd: the proposed rule is false.

An odd number of odd groups leaves one object unpaired.

Answer: For example, $3 \times 5 = 15$. $\text{Odd} \times \text{odd}$ is odd.