Positive/negative contexts

6 questions | 8 marks

Equivalent correct methods earn the corresponding marks.

1. Write 5 degrees below zero as a signed temperature. [1 mark]

Below zero is negative.

Answer: $-5\,^{\circ}\mathrm{C}$.

2. A diver is 9 metres below sea level, which is 0. Write the position. [1 mark]

Use a negative position below sea level.

Answer: -9 m.

3. Describe a balance of -18 dollars. [2 marks]

The sign describes debt relative to zero.

Answer: The account is 18 dollars below zero, or 18 dollars is owed.

4. Write 12 metres above sea level as a signed height. [1 mark]

Above the reference is positive.

Answer: $+12$ m or 12 m.

5. Is zero positive or negative? [1 mark]

Zero separates the positive and negative sides.

Answer: Neither.

6. A game starts at 0 points. Amira has -3 and Ben has $+4$. Explain each score. [2 marks]

Use the same zero reference for both.

Answer: Amira is 3 below the starting score; Ben is 4 above it.