1 In a quiz, each contestant is asked 4 questions.
Contestants score 3 points for each correct answer, −2 points for each incorrect answer and 0 if they pass (do not offer an answer).

(a) What is the score of a contestant who answers the first 3 questions correctly and answers the fourth incorrectly?
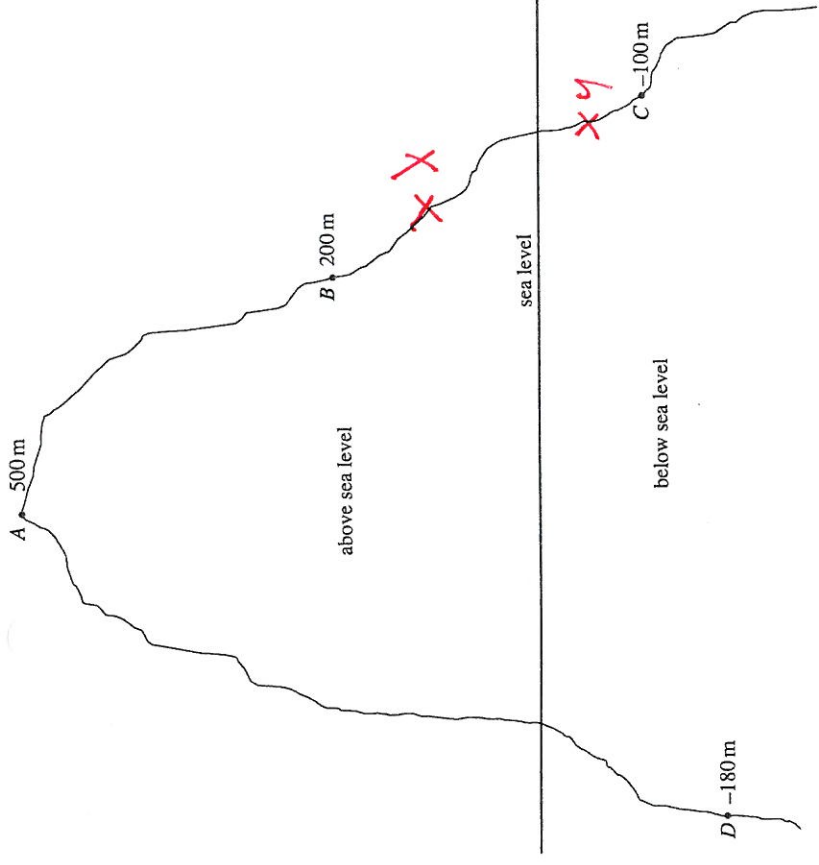
$3+3+3-2 = 7$

[1]

(b) What is the score of a contestant who answers the first question correctly, passes on the second question and answers the last two incorrectly?

$3+0-2-2 = -1$

[1]

(c) Lesley did the quiz and answered the first question correctly. Her final score was −3. Explain fully how this happened.

$3 -2 -2 -2 = -3$
So 1st correct, rest incorrect

[2]

2

(a) One day, the temperature in Swansea at 10.00 am was 4°C.
By 3.00 pm the temperature had risen by 8°C.
What was the temperature at 3.00 pm?

$4 + 8 = 12°C$

[1]

(b) One day, the temperature in Bangor at 2.00 pm was 5°C.
At 11.00 pm the temperature had dropped by 9°C.
What was the temperature at 11.00 pm?

$5 - 9 = -4°C$

[1]

(c) The temperature inside a freezer was −25°C.
The electricity went off for a couple of hours and the temperature in the freezer became −18°C.
By how many degrees did the temperature change?

Risen by 7°

[1]

3

The diagram illustrates a mountain that is partly above sea level and partly below sea level.

The point A is 500 m above sea level.
The point C is 100 m below sea level and its height is shown as −100 m on the diagram.

(a) On the diagram
   (i) mark a point X that is 100 m above sea level,
   (ii) mark a point Y that is 50 m below sea level.

(b) How much higher is the point B than the point C?

300 m

[2]

(c) The point E is 40 m below the level of D.
Write down its height above sea level.

−220 m

[1]