DIRECTED NUMBERS PPQ's

(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?

....

....
[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?

....

....
[1]

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

....

....
[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?

....

....
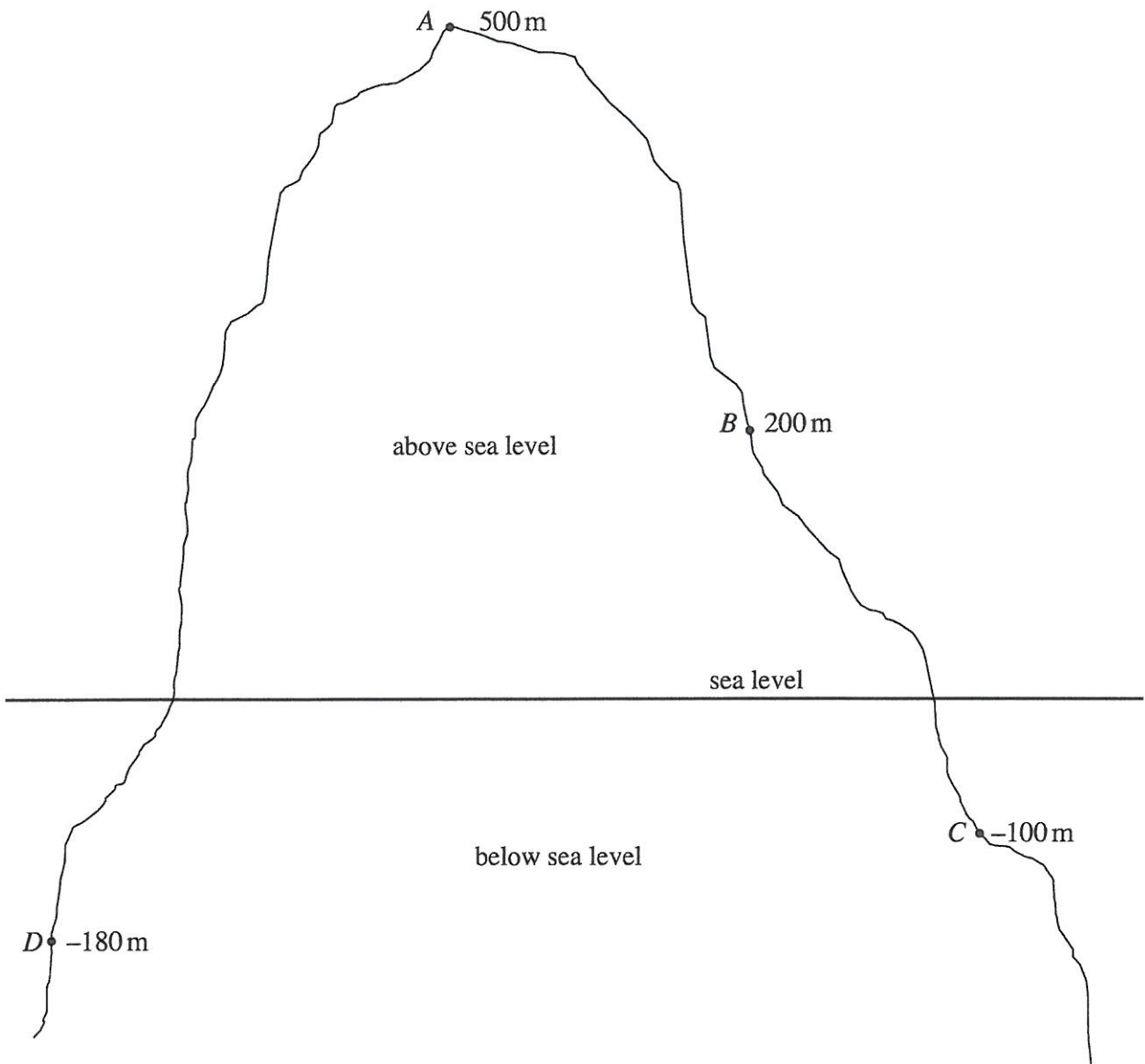[1]

(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?

....

....
[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?

....

....
[1]

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.

[2]

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

....

.... [1]

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

....

.... [1]