

1

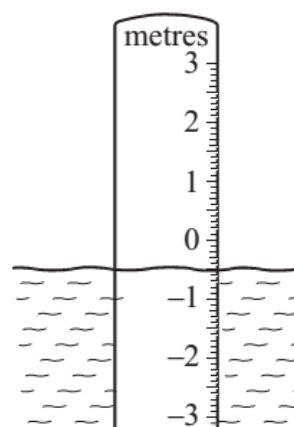
The diagram shows a gauge for measuring the water level in a reservoir.

Readings, in metres, taken over a certain period were as follows:

-2.3 , -1.6 , -0.4 , 0.1 , -0.5 , 0.3 , -1.2 .

For these readings

- (a) find the difference, in metres, between the highest and lowest levels,



2

The table shows the record minimum monthly temperatures, in $^{\circ}\text{C}$, in Vostok and London.

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Vostok	-36	-47	-64	-70	-71	-71	-74	-75	-72	-61	-45	-35
London	-10	-9	-8	-2	-1	5	7	6	3	-4	-5	-7

Find

- (a) the difference between the temperatures in Vostok and London in July,

- (b) the difference between the temperatures in Vostok in February and June.

3

An instrument is used to measure the height of an object above sea level.
The height, in metres, is shown on the dial.

(a) What is the reading on the dial?



(b) The object moves from position A, where the dial reads -54 , to position B, where the dial reads $+48$.

What is the difference in height between A and B?

4

The table shows the height, in metres, above sea level of the highest and lowest points in some continents.

A negative value indicates a point below sea level.

	Asia	Africa	Europe	South America
Highest point (m)	8850	5963	5633	6959
Lowest point (m)	-409	-156	-28	-40

(a) What is the height above sea level of the highest point in Africa?
Give your answer in **kilometres**.

(b) In South America, how much higher is the highest point than the lowest point?
Give your answer in metres.

(c) How much higher is the lowest point in Europe than the lowest point in Asia?
Give your answer in metres.

5.

The temperature in a freezer is -18°C .
The outside temperature is 24°C .

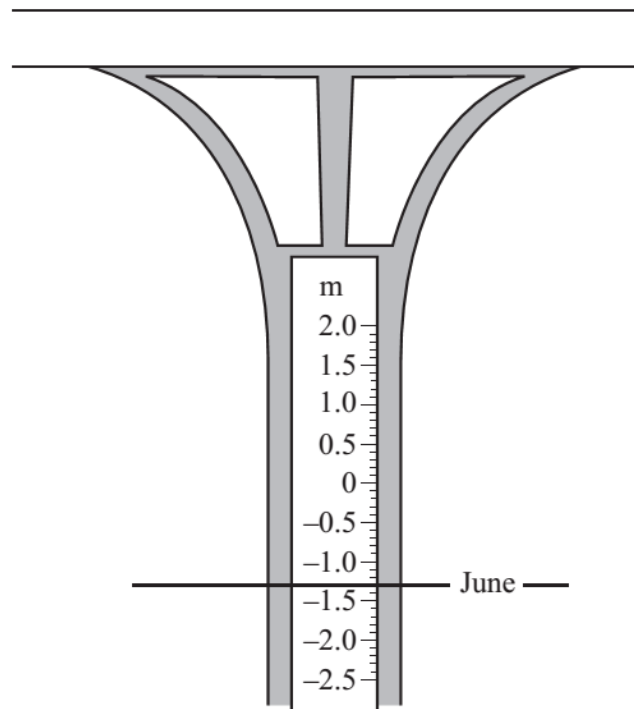
(a) Find the difference between the outside temperature and the freezer temperature.

(b) The temperature in a fridge is 22°C warmer than the freezer temperature.

Find the temperature in the fridge.

6.

The diagram shows a scale used to measure the water level in a river.



The table shows the reading, in metres, at the beginning of each month.

Month	January	February	March	April	May	June	July
Reading (m)	0.8	1.2	1.3	0.5	-0.1		-1.9

(a) The diagram shows the water level at the beginning of June.

Complete the table with the June reading.

[1]

(b) Work out the difference between the highest and lowest levels shown in the table.

- (c) The August reading was 0.4 m higher than the July reading.

Work out the reading in August.

7.

- (a) One morning the temperature was 5°C .
By the evening the temperature had dropped 9°C .

Write down the temperature in the evening.

8.

Tasnim records the temperature, in $^{\circ}\text{C}$, at 6 a.m. every day for 10 days.

−6 −3 0 −2 −1 −7 −5 2 −1 −3

- (a) Find the difference between the highest and the lowest temperatures.

- (b) Find the median temperature.

9.

The table shows some information about the temperatures in a city.

Date	Maximum temperature	Minimum temperature
1 February	-10°C	$T^{\circ}\text{C}$
1 March	4°C	-5°C

(a) Find the difference between the maximum and minimum temperatures on 1 March.

(b) The minimum temperature, $T^{\circ}\text{C}$, on 1 February was 13 degrees lower than the minimum temperature on 1 March.

Find T .