1. Here are two thermometers.

They show two different temperatures.


What is the difference between the two temperatures?


1 mark
2. $\mathbf{A}$ and $\mathbf{B}$ are two numbers on the number line below.


The difference between $\mathbf{A}$ and $\mathbf{B}$ is 140
Write the values of $\mathbf{A}$ and $\mathbf{B}$.

3.


The temperature inside an aeroplane is $20^{\circ} \mathrm{C}$.
The temperature outside the aeroplane is $-30^{\circ} \mathbf{C}$.
What is the difference between these temperatures?


1 mark
4. A sequence starts at $\mathbf{5 0 0}$ and $\mathbf{8 0}$ is subtracted each time.
500
420
340 ...

The sequence continues in the same way.
Write the first two numbers in the sequence which are less than zero.

5. Two thermometers show the temperature inside and outside a greenhouse on a day in January.


How many degrees warmer was it inside the greenhouse than outside?


1 mark

Later the temperatures were

| inside | outside |
| :---: | :---: |
| $-1^{\circ} \mathrm{C}$ | $-8^{\circ} \mathrm{C}$ |

What is the difference between these two temperatures?


1 mark
6. Paulo makes a sequence of numbers.

He chooses a starting number and then subtracts equal amounts each time.
The third number in his sequence is 45
The tenth number is $\mathbf{- 3 2}$


What is the first number in the sequence?

7. Circle two numbers which have a difference of 2
$-1 \quad-0.5$
$0 \quad 0.5$
1
1.5
8. These are the temperatures in York and Rome on a day in winter.


How may degrees colder is it in York than in Rome?


1 mark

On another day, the temperature in York is $4^{\circ} \mathrm{C}$
Rome is $\mathbf{7}$ degrees colder than York.
What is the temperature in Rome?


1 mark
9. Circle two numbers with a difference of 8 .

## $\begin{array}{lllllllllll}-5 & -4 & -3 & -2 & -1 & 0 & 1 & 2 & 3 & 4 & 5\end{array}$

1 mark

Write two numbers with a sum of -6


1 mark
10. Here is a table of temperatures at dawn on the same day.

| Temperatures ${ }^{\circ} \mathbf{C}$ |  |
| :--- | ---: |
| London | $-4^{\circ}$ |
| Moscow | $-6^{\circ}$ |
| New York | $-99^{\circ}$ |
| Paris | $+6^{\circ}$ |
| Sydney | $+14^{\varrho}$ |

What is the difference in temperature between London and Paris?


1 mark

At noon the temperature in New York has risen by $5^{\circ} \mathrm{C}$.
What is the temperature in New York at noon?


1 mark

