1) Write the numbers in the correct place on each number line.

a)


b)

c) This number line has no marked intervals. Where could these numbers be positioned?

| 3 | -10 | -8 |
| :--- | :--- | :--- |


2) Here is a number line without intervals.
a) Estimate where on the number line each number should go and then write it in the correct position.

-12 0

b) Choose any two of the numbers and explain how you estimated their position.

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3) Mary is watching the weather forecast. In Iceland, it is $-7^{\circ} \mathrm{C}$ and in Alaska, it is $-17^{\circ} \mathrm{C}$. Mary says it is warmer in Alaska than in Iceland because 17 is greater than 7. Why is Mary incorrect?
4) This alien recorded the temperature on their home planet at the same time every day for a week.

| Day | Temperature |
| :---: | :---: |
| Monday | $-13^{\circ} \mathrm{C}$ |
| Tuesday | $-4^{\circ} \mathrm{C}$ |
| Wednesday | $2^{\circ} \mathrm{C}$ |
| Thursday | $-10^{\circ} \mathrm{C}$ |
| Friday | $-5^{\circ} \mathrm{C}$ |
| Saturday | $1^{\circ} \mathrm{C}$ |
| Sunday | $-19^{\circ} \mathrm{C}$ |

Are these statements true or false? Prove it!
a) Saturday was $5^{\circ} \mathrm{C}$ warmer than Friday.
b) Sunday was the coldest day.
c) Tuesday was colder than Friday.
d) If Wednesday had been $5^{\circ} \mathrm{C}$ colder, it would have been the same temperature as Tuesday.


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A

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B
$C$ is a negative number between -2 and -8 .
$B$ is 9 less than $C$.
a) What could the values of $B$ and C be? Find all possibilities.
b) $A$ is 10 less than $B$. What could A be? Find all possibilities.
2) Each alien has started from a number and worked their way up the maze to the finish line.

| Finish |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| -15 | -19 | -10 | -9 | -28 | -33 | -31 | -29 |  |  |
| -22 | -16 | -17 | -17 | -29 | -25 | -23 | -25 |  |  |
| -17 | -8 | -15 | -13 | -15 | -25 | -22 | -19 |  |  |
| -16 | -17 | -8 | -11 | -11 | -16 | -21 | -16 |  |  |
| -15 | -9 | -9 | 6 | -1 | -17 | -13 | -10 |  |  |
| -2 | -12 | -7 | 8 | -13 | -10 | -7 | -8 |  |  |
| -4 | -3 | -9 | -5 | -9 | -7 | -6 | -6 |  |  |
| -1 | 15 | -6 | -3 | 12 | -5 | -4 | 7 |  |  |
| Start |  |  |  |  |  |  |  |  |  |

a) Can you find each alien's correct route? You can move horizontally, vertically or diagonally.


Look for numbers counting backwards in steps of 2.

Look for numbers counting backwards in steps of 3.

b) This sneaky little alien has hidden another route but he won't reveal the counting instruction. Can you find another route from one of the starting numbers to a finish number, counting backwards in the same step each time and reveal the counting instruction?

