

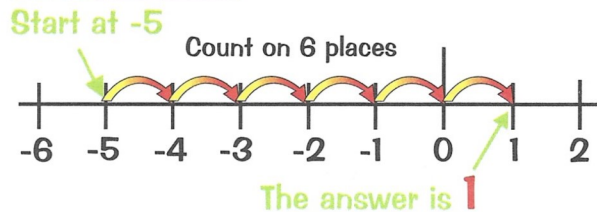
Counting Backwards Through Zero

Adding and Subtracting Negative Numbers

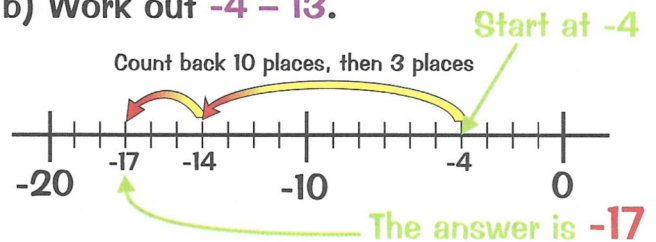
Number lines are really useful for problems using negative numbers.

EXAMPLES:

a) What is $-5 + 6$?

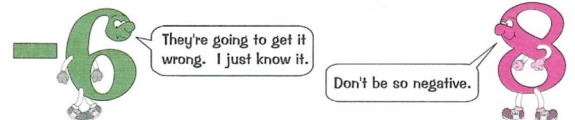
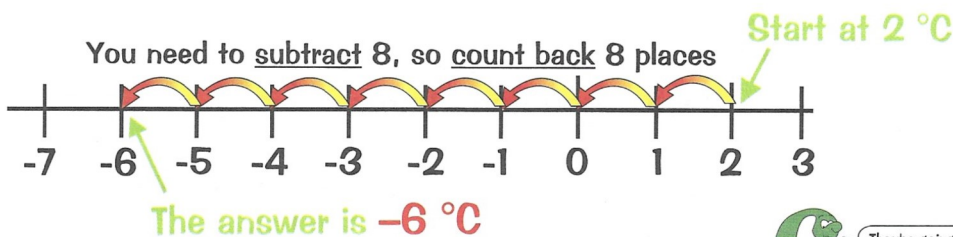


b) Work out $-4 - 13$.



c) The temperature in my garden this morning is 2°C .

Last night it was 8°C colder. What was the temperature last night?



Working Out Differences

EXAMPLE:

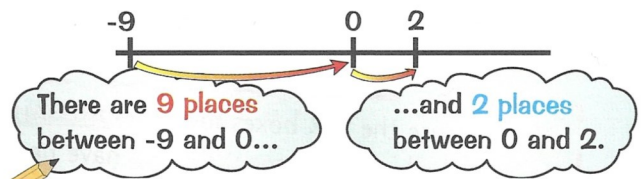
The temperature in Neil's freezer was -9°C .

Neil filled his freezer with shoes.

The temperature rose to 2°C . What was the rise in temperature?

Sketch the number line. Mark the two temperatures on it then count how many degrees there are between them.

It's often easiest to count the places to zero, then the number of places after zero, and then add them together... $9 + 2 = 11^\circ\text{C}$.

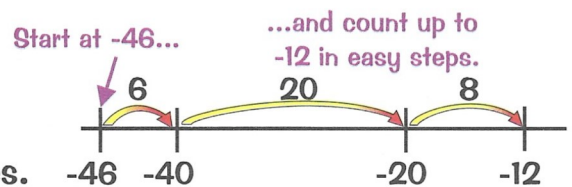


EXAMPLE:

The temperature in Icetown is -46°C .

The temperature in Froston is -12°C .

Find the difference between these temperatures.



So the difference is $6 + 20 + 8 = 34^\circ\text{C}$.

(You could also do this by counting back from -12 to -46 .)

"I can count backwards and forwards through zero, and solve problems with negative numbers in."

