

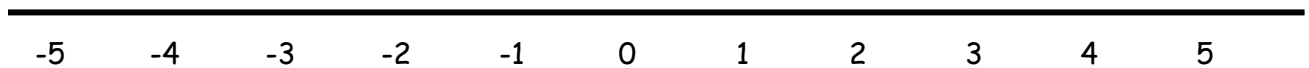
I am learning to use pictures to help me solve addition and subtraction questions with integers (positive and negative numbers).



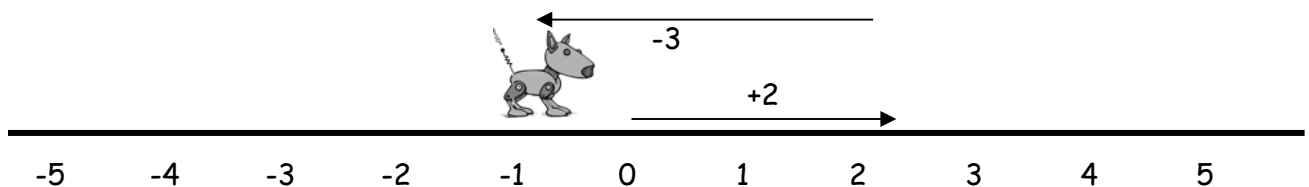
Taine has a new toy robot. It can be programmed to go both forwards and backwards.

If Taine types in  $-1 + -3 = \dots$   
The robot dog moves backwards 1 step and then backwards 3 more steps. That means the dog will go to  $-4$  on the number line.

If Taine types in  $2 + 1 = \dots$   
The robot dog moves 2 steps forward and then 1 more step forward. That means the dog will go to 3 on the number line.



1) Taine types in  $2 + -3 = \dots$ . The robot dog moves forward two spaces and then moves three spaces backwards (as you can see on the diagram below). This shows us that  $2 + -3 = -1$ .



Try these questions on your own. You may find it helpful to use the number line above.

Question	Answer	Question	Answer
1a) $4 + -2 = \dots$		1d) $3 + -1 =$	
1b) $-3 + 1 = \dots$		1e) $-5 + 4 =$	
1c) $-2 + -2 = \dots$		1f) $-1 + 4 =$	



Sam has a thermometer. He uses it to record changes in the temperature. Use the thermometer below to help you work out the following questions.

