

# Negative Calculations

To calculate intervals across zero.

When calculating with positive and negative numbers, it is helpful to think of balloons and weights.

Positive numbers are like balloons. If you add balloons, the house will go up. If you take balloons away, the house will go down.

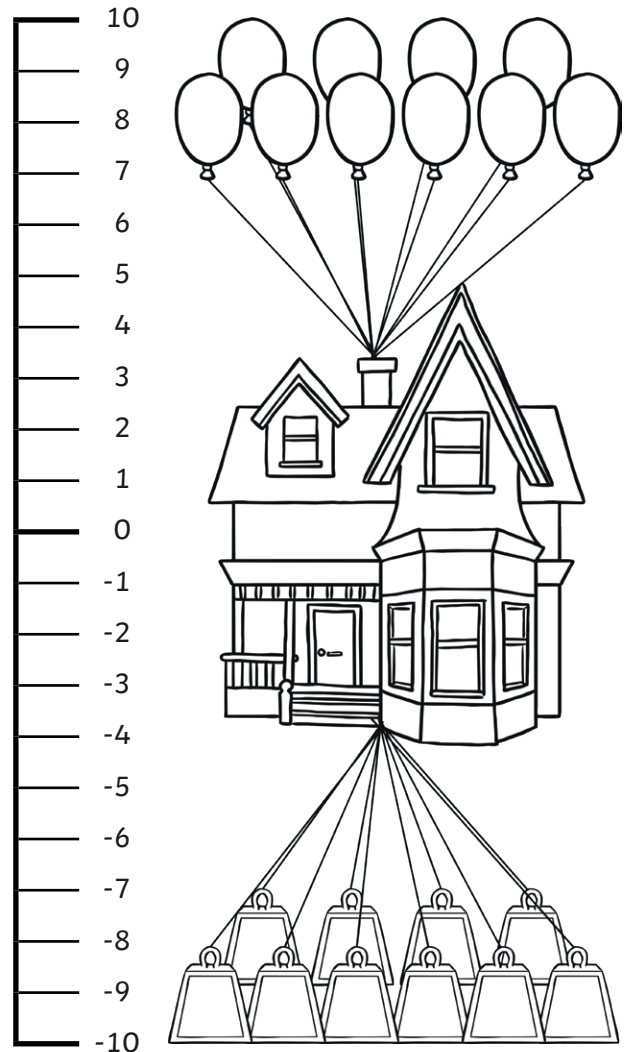
Negative numbers are like weights. If you add weights, the house will go down. If you take weights away, the house will go up.

This idea of balloons and weights can help us to solve calculations. Think of positive numbers as balloons. For example, if we see the calculation  $3 + 4$ , we know that adding 4 balloons will cause the house to go up by 4, so the number will get bigger. The answer is of course 7. If we see  $4 - 6$ , we know that taking away 6 balloons will cause the house to go down by 6, so the number will get smaller. The answer is -2.

When we calculate with negative numbers, we need to think of them as weights. In the calculation  $7 + -5$ , we are adding 5 weights. This would cause the house to go down by 5 and the number would get smaller. The answer is 2. If we see  $6 - -2$ , we are taking away 2 weights, so the house will actually go up by 2 and the number will get bigger. The answer is 8.

Use the idea of adding and taking balloons and weights to solve these calculations involving both positive and negative numbers.

$3 + -7 =$	$-2 - 7 =$	$5 - -2 =$	$5 + -9 =$	$10 + -3 =$
$-5 + 3 =$	$8 - -6 =$	$2 - -5 =$	$3 + -2 =$	$1 - -1 =$



# Negative Calculations Answers

$3 + -7 = \textcircled{-4}$	$-2 - 7 = \textcircled{-9}$	$5 - -2 = \textcircled{7}$	$5 + -9 = \textcircled{-4}$	$10 + -3 = \textcircled{7}$
$-5 + 3 = \textcircled{-2}$	$8 - -6 = \textcircled{14}$	$2 - -5 = \textcircled{7}$	$3 + -2 = \textcircled{1}$	$1 - -1 = \textcircled{2}$