Name _____ Date _____

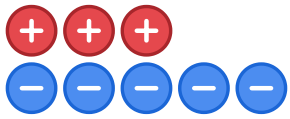
INTEGERS WITH COUNTERS · LESSON 3

Adding Integers with Different Signs

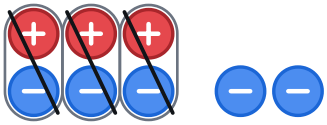
red counter = +1 blue counter = −1 zero pair = 0

Example

3 + (−5) = ?



1 Join 3 red and 5 blue counters.



2 Circle the zero pairs and cross them out.



3 2 blue counters are left.

3 + (−5) = −2

1 Draw counters, circle and cross out the zero pairs, then work it out.

5 + (−2) = ☐

4 + (−4) = ☐

2 + (−6) = ☐

−5 + 3 = ☐

−3 + 3 = ☐

−1 + 4 = ☐

Check in the app **otooly.com/counters**.

2 Work out both sums with counters. What do you notice?

$3 + (-5) =$ ☐ $-5 + 3 =$ ☐

If we swap the addends, the sum _____.

3 Complete the sign table and write your own example for each row.

STEP	DESCRIPTION	FIRST ADDEND	SECOND ADDEND	SUM	MY EXAMPLE
4.	**Adding a positive and a negative number**	+	−		
		+	−		
		+	−		
5.	**Adding a negative and a positive number**	−	+		
		−	+		
		−	+		

What does the sign of the sum depend on?

---

4 Without drawing: how many zero pairs are there and what is left?

SUM	ZERO PAIRS	COUNTERS LEFT	COLOUR	SUM IS
7 + (−10)				
−6 + 9				
8 + (−8)				
−12 + 5				

Remember

When we add numbers with different signs, we get _____. The sum takes the sign of the counters there are _____ of.

The sum of opposite numbers is _____.