Name _____ Date _____

INTEGERS WITH COUNTERS · LESSON 4

The Rule for Adding Integers

1 All the sign cases. Fill in the Sum column and write your own example with its result for each row.

STEP	DESCRIPTION	FIRST ADDEND	SECOND ADDEND	SUM	MY EXAMPLE
0.	Adding non-negative integers	+	+		
		+	0		
		0	+		
		0	0		
1.	Adding negative integers	−	−		
2.	Adding zero and a negative number	0	−		
3.	Adding a negative number and zero	−	0		
4.	Adding a positive and a negative number	+	−		
		+	−		
		+	−		
5.	Adding a negative and a positive number	−	+		
		−	+		
		−	+		

2 Look at the Sum column.

a) In which rows is the sign of the sum always the same, whatever numbers you choose?

_____

_____

b) In which rows does the sign of the sum depend on the numbers you choose? What does it depend on?

_____

_____

3 Complete the rules.

To add numbers with **the same sign**, add their _____ values and give the sum the _____ sign.

To add numbers with **different signs**, subtract the _____ absolute value from the larger one and give the sum the sign of the number with the _____ absolute value.

The sum of opposite numbers is _____.

4 Work these out.

a) −14 + 9 = _____ **b)** 23 + (−31) = _____ **c)** −18 + (−27) = _____

d) 45 + (−45) = _____ **e)** −60 + 38 = _____ **f)** 0 + (−72) = _____

g) −7 + 19 = _____ **h)** 56 + (−29) = _____ **i)** −33 + (−67) = _____

5 Solve the problems. Write the calculation and the answer.

a) In the morning the temperature was −4 °C, and by noon it had risen by 9 °C. What was the temperature at noon?

b) A lift is on floor −2 (the car park). It goes up 7 floors and then down 6 floors. Which floor is it on?

c) A diver is 12 m below the surface (−12 m). She rises 5 m. How deep is she now?

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