

2.1a Homework: Additive Inverse (Zero Pairs) in Context and Chip/Tile Model


Fill in the table below.



Context	Model/Picture	Net Result in Words	How Many Zero Pairs?
1. The Helium atom had two protons and two electrons.			
2. The treasure map said to take ten steps north, then eight steps south.			
3. Jen earned \$6 working in the garden, and then she spent \$5 on a toy.			
4. The elevator started on the 8 th floor, went up five floors, and then went down two floors.			
5. Seven students were added to Ms. Romero's class and then four students dropped it.			
6. The temperature fell twelve degrees between midnight and 6 a.m. The temperature rose twelve degrees between 6 a.m. and 8 a.m.			
7. The home team scored a goal, which was answered with a goal from the visiting team.			
8. The football team gained seven yards on the first down, and lost nine yards on the second down.			


Circle the operation, draw a chip/tile model for each sum, and then state the sum. The first one is done for you.

For the following exercises, use the key below:

 = 1

 = -1

n#

<p>9. $7 \oplus (-4)$</p> <p>3</p> 	<p>10. $-3 + 8$</p>
<p>11. $4 + 6$</p>	<p>12. $-5 + 8$</p>
<p>13. $-4 + (-2)$</p>	<p>14. $-6 + (-3)$</p>
<p>15. $7 + (-6)$</p>	<p>16. $4 + (-8)$</p>
<p>Extension Questions:</p> <p>Suppose $a + b = c$ and $c < 0$, give an example when this might happen.</p> <p>What do you know about a and b relative to each other for $c < 0$?</p>	

Spiral Review

- Order the following rational numbers from least to greatest. $\frac{27}{3}$, 6.5, $\frac{18}{3}$, 0.99,
- What is the opposite of -15 ?
- What is 40% of 220? Use a bar model.
- Without using a calculator, determine which fraction is bigger in each pair. Justify your answer with a picture *and* words.
 - $\frac{1}{3}$ or $\frac{1}{2}$
 - $\frac{3}{7}$ or $\frac{3}{5}$
- Solve using a bar model. $\frac{1}{2} + \frac{3}{7} =$ _____