

Integer Vocabulary in Word Problems

When you begin working on positive and negative numbers, the word problems use vocabulary that translates to the sign of the number. Think in terms of the direction the money travels: is it coming to the person (positive) or leaving them (negative)? Here are some common ones and what they usually mean:

Vocabulary for Money or Finance:

Means Positive Number (+)
Receives / Makes or Gets (money)
Sells / Sells for / Sold
Deposits / Credit / Assets
Revenue
Income / Salary
Profit / Gain / Won
Paycheck / Someone <i>is/was paid</i>

Means Negative Number (-)
Spends / Pays / Paid / Costs
Buys / Bought
Withdraws / Takes out (money) / Debits
Expenses / Cost
Deducts / Deductions
Loss
Writes a check for

Vocabulary for Solution Process:

Total revenue means add up the positives

Total costs/expenses means add up the negatives

Balance, Net, or Change means to either work left to right combining each number with the next, or combine the total positives and total negatives (remember, they are different signs, so you)

Examples:

<p>Jerry is paid twice a month. Last month, his first paycheck was for \$52. He paid \$18 for gasoline and \$20 for food. His next paycheck was for \$65. He paid \$16 for gasoline and \$25 for food. What is his balance?</p> $52 - 18 - 20 + 65 - 16 - 25$ $34 - 20 + 65 - 16 - 25$ $14 + 65 - 16 - 25$ $79 - 16 - 25$ $63 - 25$ 38 <p>OR: $(52 + 65) + (-18 - 20 - 16 - 25)$ $(117) + (-79) = 38$</p> <p>Jerry's balance is \$38.00</p>	<p>Karen deposits \$165 in her checking account. She then withdraws \$25, and writes checks for \$23 and \$17. She makes another deposit of \$45. Later she writes checks for \$18, \$33, and withdraws \$20. What is her balance? (<i>Did you get \$74?</i>)</p>
<p>Marie plays the state lottery. During the lotteries in June, she lost \$10, won \$20, lost \$8, lost \$12, and won \$25. What was the net result of her playing?</p> $-10 + 20 - 8 - 12 + 25$ $10 - 8 - 12 + 25$ $2 - 12 + 25$ $-10 + 25$ 15 <p>Marie won \$15.</p>	<p>Eric plays poker with his friends on Friday and Saturday nights. Last month he won \$15, won \$8, lost \$12, won \$23, lost \$3, lost \$30, and missed the last weekend. What was the net result of his playing? (<i>Did you get that he won \$1?</i>)</p>

Vocabulary for Construction / Temperature / Heights (above/below sea level):

Means Positive Number (+)	Means Negative Number (-)
Higher	Lower
Increases / goes up / raises	Decreases / drops / lowers
Above	Below
Over	Under
Loaded	Unloaded / Removed
Received	Shipped
Gain / Gained	Loss / Lost

Vocabulary for Solution Process:

Difference in, or Change means to subtract the two numbers (including their signs)

<p>During their 4 plays from a first down, Mt. SAC's football team gained 3 yards, lost 5, gained 7, and then gained 2. Did they gain enough yards for a first down (10 yards or more)?</p> $3 - 5 + 7 + 2$ $- 2 + 7 + 2$ $5 + 2$ 7 <p>No, they gained 7 yards, but not 10 yards.</p>	<p>Judy and Carl are playing a card game in which each player tries to gain points and cause their opponent to lose points. In Judy's plays, she gained 8 points, lost 4, gained 5, lost 7, and gained 1. How many points did she end up with? Carl had 5 points. Who won? (<i>Did you get that Judy ended up with 3 points?</i>)</p>
<p>In northern Michigan, winter temperatures can vary widely. One day, at midnight it was -16 degrees. By 8 am, it had gone up 8 degrees. It increased another 25 degrees by noon, and was up 12 more degrees by 4 pm. But then it dropped 15 degrees by 6 pm, 12 degrees by 9 pm, and finally decreased by 8 more degrees by midnight. What was the temperature that second midnight?</p> $- 16 + 8 + 25 + 12 - 15 - 12 - 8$ $- 8 + 25 + 12 - 15 - 12 - 8$ $17 + 12 - 15 - 12 - 8$ $19 - 15 - 12 - 8$ $4 - 12 - 8$ $- 8 - 8$ $- 16$ <p>The temperature the next midnight was - 16 degrees</p>	<p>Paula and Mike are always fighting over the thermostat at the office. Mike gets in first and sets it at 70 degrees. When Paula arrives, she raises it 8 degrees. Mike later lowers it 6 degrees, but Paula raises it again another 4 degrees. Mike lowers it 5 degrees. Finally, maintenance locks the thermostat at this temperature. What is it? (<i>Did you get 71 degrees?</i>)</p>