

Name: _____ Date: _____

In the Black

Signed Numbers



-15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

From a starting position of 3, Susie gains 5 points, then loses 4, gains another 2, then loses 10. How many points does she have now?

Remember: GAIN = more, plus, addition
 LOSS = less, minus, subtraction

Herman and Cleo decide to start a lemonade stand to make some extra summer cash. They start with a combined amount of \$20. The table below shows their expenses and income each day. Do they make a profit? Remember, at the end of their venture they both want their part of the \$20.00 back. (End on the plus side - In the Black?) If so, by how much? What could they do to increase their profits?

Remember: EXPENSES = less, minus, subtraction
 INCOME = more, plus, addition

Day	Beginning	Expenses	Income	Profit
1	\$20.00	\$9.50	\$5.00	
2		\$0	\$5.00	
3		\$12.00	\$8.00	
4		\$10.00	\$3.00	
5		\$0	\$5.00	

Thinking Cap

How does a football game illustrate positive and negative numbers? Can you think of other sports activities that use signed numbers? Pick a sport that uses signed numbers and "create" a game showing their use.

In the Black

Signed Numbers

Using this Activity:

Remind students that a gain means that you move towards the right on the number line, while loss means moving to the left.

Remind the students that the Profit amount from the day before becomes the beginning amount for the next day. They also need to remember that the partners started with a combined total of \$20.00 and this should be subtracted from any ending profit to determine the overall net profit of the venture.

Answers:

Susie has NO points - is in the hole by 4 points. She has -4 points.

Herman and Cleo

Day 1: Profit = \$15.50

Day 2: Profit = \$20.50

Day 3: Profit = \$16.50

Day 4: Profit = \$9.50

Day 5: Profit = \$14.50

Herman and Cleo have no overall profit. In fact, they have lost \$5.50 since their combined initial investment was \$20.00.

Objective: Use the calculator to solve problems involving signed numbers

NCTM Standards: Mathematics as Problem Solving; Number and number relationships; Computation and Estimation