



Bank Account Tracker

Mission: Your savings account starts with \$25. Earn money, spend money, and see what happens when you spend more than you have. Use absolute value to describe how much you owe.

Big question: How do negative numbers and absolute value describe money owed?

★ Warm-up: True or false?

Decide and fix.

A balance of $-\$10$ means you have \$10. ✓ **False: you owe \$10.**

$|-10| = 10$ ✓ **True.**

Key vocabulary

Balance	The amount of money in an account.
Deposit	Money added (+).
Withdrawal	Money taken out (−).
Debt	Money owed; a negative balance.
Absolute value	The size of a number without its sign.

1 Box 1

Overspend

In the simulator: Buy the bike helmet (\$40) right away.

Your balance is $-\$15$. What does that mean?

☐ You owe the bank \$15 ☐ You have \$15 ☐ You have \$40

✓ **You owe the bank \$15**

2 Box 2

Absolute value

What is $|-15|$?

Answer: _____ ✓ **15**

3 Box 3

Deeper in debt

In the simulator: From $-\$15$, buy the video game too.

Which statement is true?

☐ $-45 < -15$, and owing \$45 is a bigger debt ☐ $-45 > -15$ ☐ The debts are the same

✓ **$-45 < -15$, and owing \$45 is a bigger debt**

4 Box 4

Climb out

In the simulator: Add deposits until you are out of debt (balance 0 or more).

How much money did you need to deposit to get from $-\$45$ back to \$0?

Answer: _____ \$ ✓ **45**

5 Box 5

Legend: which is worse?  Legend only

Sort each account.

Sort: $-\$35$ · $-\$12$ · $\$5$ · $-\$21$ · $-\$20$

Owes more than \$20	Owes \$20 or less / has money
$-\$35$ $-\$21$	$-\$12$ $\$5$ $-\$20$

6 Box 6

Explain debt

Explain why $-\$45$ is LESS than $-\$15$, but is a BIGGER debt.

Look for: Compares on the number line; Uses absolute value or owing

 **Exit ticket: answer the big question in your own words**

How do negative numbers and absolute value describe money owed?

Look for: A negative balance means debt: $-\$15$ means you owe \$15. Absolute value tells the size of the amount without the direction: $|-15| = 15$. A balance of $-\$30$ is a bigger debt than $-\$15$, even though $-30 < -15$.

Completion codes

Students see a code like **ABC-13** when they finish. The first part must match below. The letter is the level (E = Explorer, I = Investigator, L = Legend), and the number at the end is how many stars they earned.

Level	Code starts with
 Explorer	1GQ-E
 Investigator	1QV-I
 Legend	VYI-L

! Watch for these misconceptions

- " -8 is greater than -3 because $8 > 3$." On the number line, -8 is farther left.
- "Absolute value makes a number the opposite." It is distance, so $|5|$ is still 5.
- " $(3, 2)$ and $(2, 3)$ are the same point." Order matters: x first, then y.