

Balance Up and Down

GRADE 4

MATHEMATICS

B2.4

D1.3

A balance goes up when you earn and down when you spend. Work left to right and do one step at a time. Example: start \$50, earn \$20, and the balance is $50 + 20 = \$70$.

PART A: ONE STEP AT A TIME

1. Start \$50. Earn \$20. New balance: \$_____.
2. Start \$70. Spend \$30. New balance: \$_____.
3. Start \$120. Earn \$40. New balance: \$_____.

PART B: TWO STEPS

4. Start \$80. Earn \$15, then spend \$10. New balance: \$_____.
5. Start \$200. Spend \$60, then earn \$30. New balance: \$_____.
6. Start \$45. Earn \$35, then spend \$20. New balance: \$_____.

PART C: PICK THE GRAPH

7. You want to show what was earned and what was spent in each of two weeks, side by side. The best graph is:
☐ (A) A multiple-bar graph ☐ (B) A single bar graph ☐ (C) A tally chart
8. Your tallest bar will reach \$60. If the side of the graph counts up in tens, how many steps of ten does it take to reach \$60?
☐ (A) 6 steps ☐ (B) 60 steps ☐ (C) 2 steps

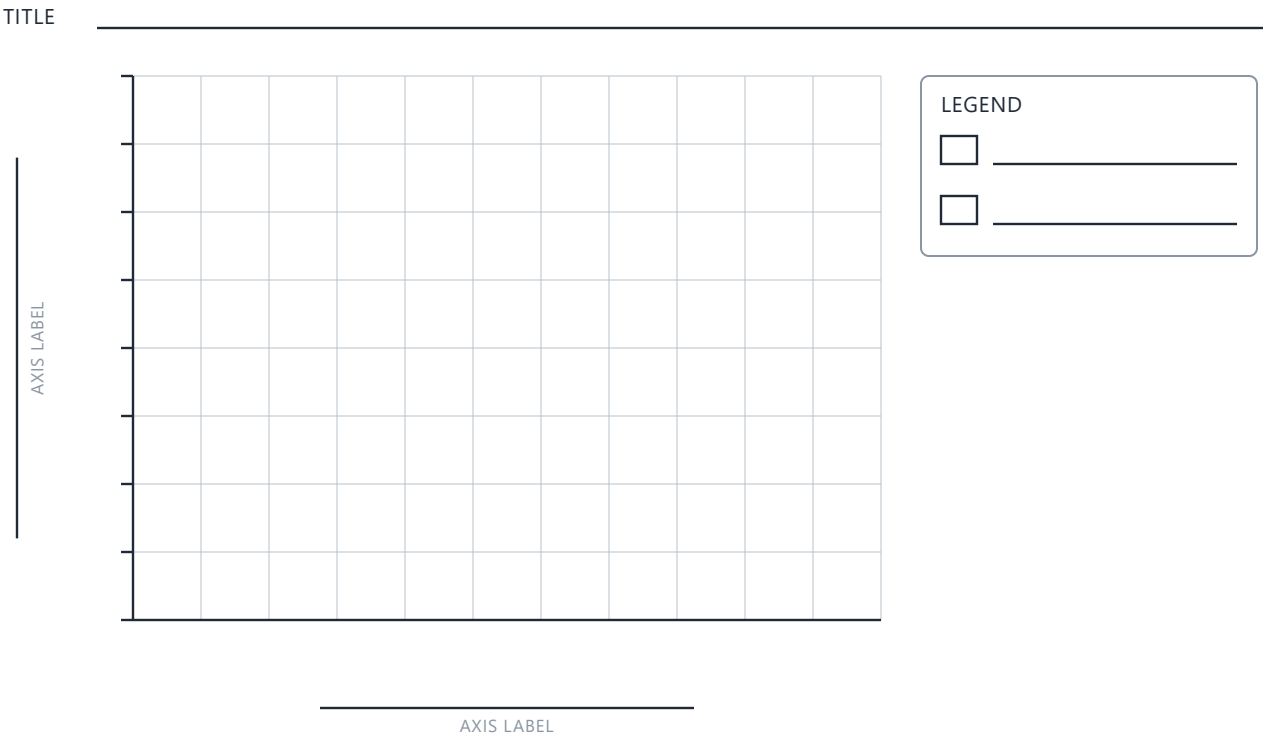
PART D: DRAW THE BARS

9. Draw a multiple-bar graph of the table in the frame, with a bar for what was earned and a bar for what was spent side by side for each week. Count the side up in tens, label the bottom and the side, give the graph a title, fill in the legend to show which bar is which, and write where the numbers came from.

Two Weeks at the Class Store

Week	Earned	Spent
Week 1	\$60	\$35
Week 2	\$45	\$40

Source: our class store records



WHERE THE NUMBERS CAME FROM _____

10. Finish this sentence: I chose a multiple-bar graph because ____.

PART E: A WEEK IN THE ECONOMY

- 11.** Nathan starts the week with \$90. He earns \$45 at payday and spends \$30 at the class store. What is his balance at the end of the week?

SHOW YOUR WORK

Answer: _____

- 12.** Chidinma starts with \$150 and ends the week with \$125. She earned \$25 that week. How much did she spend?

SHOW YOUR WORK

Answer: _____

PART F: YOUR OWN WEEK

- 13.** Write your own two-step balance story. Give a starting balance, one amount earned and one amount spent, then show the balance at the end.

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ANSWER KEY

1. 70
2. 40
3. 160
4. 85
5. 170
6. 60
7. A) A multiple-bar graph
8. A) 6 steps
9. Two pairs of bars, Week 1 at \$60 and \$35 and Week 2 at \$45 and \$40, with the side counting up in tens to at least \$60. The weeks written under their bars, a label along the bottom such as "Week" and up the side such as "Dollars", a title such as "Earning and Spending Over Two Weeks", a legend shading one kind of bar for earned and another for spent, and a source line such as "our class store records".
10. The reason should say that a multiple-bar graph puts what was earned next to what was spent, so the two can be compared week by week.
11. \$105.
12. \$50, because \$150 plus the \$25 earned is \$175, and \$175 take away her final \$125 is \$50.
13. Answers will vary. Check that the final balance is the starting amount, plus what was earned, take away what was spent.

TEACHER NOTES

Reduced expectations: one operation per question in Part A before Part B combines two, numbers stay under \$250, and the D1.3 work is scaffolded: Part C makes the graph choice and the scale into multiple choice, and Part D gives the data in a table and tells students to count in tens. The frame still leaves the scale, both labels, the title, the legend and the source for the student to write. Part E question 2 runs a step backwards, which is the first real stretch on the page.