

Review 87

Application of Integers

To find a *balance*, add the income (positive number) and the expenses (negative number). The sum is the balance.

Balance Sheet for Lunch Express		
Month	Income	Expenses
January	\$1,095	-\$459
February	\$1,468	-\$695
March	\$1,773	-\$700
April	\$602	-\$655

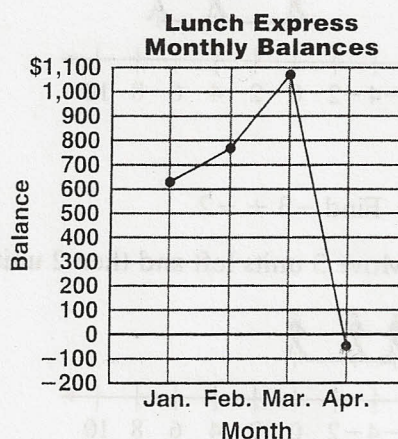
- To find the balance for February, add
 $1,468 + (-695) = 773$.
 Lunch Express made a profit of \$773.
- To find the balance for April, add
 $602 + (-655) = -53$.

Lunch Express had a loss of \$53.

Sum $1,095 + (-459) = 910$ *Mar* $1,773 + (-700) = 1,073$

To look for a trend in the data, draw a line graph of the monthly balances.

- Balances range from -\$53 to \$1,073. Make the vertical scale from -\$200 to \$1,100. Use intervals of \$100.
- Use the horizontal scale for the months.



The trend was for increasing balances—until April.

Find each sum or difference.

1. $-9 + 17$

2. $51 - 83$

3. $42 - (-18)$

4. $-77 + 92$

5. $-109 + 109$

6. $28 - 4310$

7. $-156 + 429$

8. $232 - (-97)$

9. $-401 - 582$

10. $1,874 - (-1,892)$

11. $6,012 + (-3,933)$

12. $-4,401 - (-1,560)$

13. A company earned \$2,357 in January. The company earned \$2,427 in February and \$1,957 in March. The company's total expenses for the first quarter were \$4,594. What was the company's profit?

14. Your bank account is overdrawn \$31. The bank charges \$20 for being overdrawn. You deposit \$100. What is the balance of your bank account?

Name _____ Class _____ Date _____

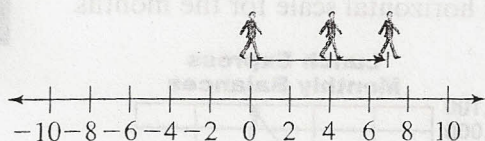
Review 82

Adding Integers

You can add integers on a number line.

Example 1: Find $4 + 3$.

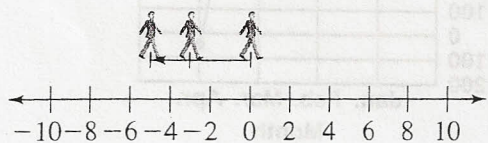
Start at 0. Move 4 units right and then 3 units right.



$4 + 3 = 7$

Example 2: Find $-3 + -2$.

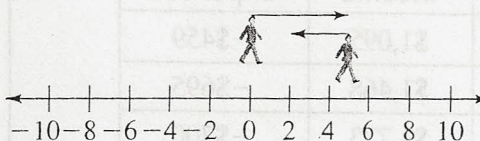
Start at 0. Move 3 units left and then 2 units left.



$-3 + (-2) = -5$

Example 3: Find $5 + (-3)$.

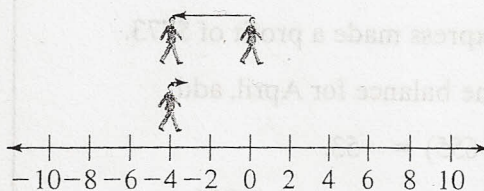
Start at 0. Move 5 units right and then 3 units left.



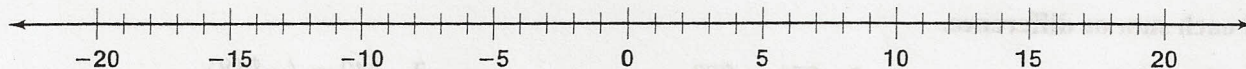
$5 + (-3) = 2$

Example 4: Find $-4 + 1$.

Start at 0. Move 4 units left and then 1 unit right.



$-4 + 1 = -3$



Use the number line to find each sum.

- | | | |
|-----------------------|----------------------|----------------------|
| 1. $3 + 2$ _____ | 2. $6 + 4$ _____ | 3. $-4 + (-1)$ _____ |
| 4. $-4 + (-8)$ _____ | 5. $4 + (-1)$ _____ | 6. $-6 + 8$ _____ |
| 7. $-7 + 3$ _____ | 8. $-5 + 8$ _____ | 9. $3 + 5$ _____ |
| 10. $-3 + (-5)$ _____ | 11. $3 + (-5)$ _____ | 12. $-3 + 5$ _____ |

Find each sum.

- | | | |
|------------------------|-----------------------|-----------------------|
| 13. $-6 + (-4)$ _____ | 14. $7 + (-2)$ _____ | 15. $-1 + (-6)$ _____ |
| 16. $9 + (-2)$ _____ | 17. $-6 + (-6)$ _____ | 18. $13 + 3$ _____ |
| 19. $-14 + (-5)$ _____ | 20. $5 + (-12)$ _____ | 21. $-9 + 9$ _____ |
| 22. $18 + (-18)$ _____ | 23. $0 + (-4)$ _____ | 24. $6 + 0$ _____ |
| 25. $15 + (-15)$ _____ | 26. $-12 + 0$ _____ | 27. $-9 + 10$ _____ |
| 28. $12 + (-11)$ _____ | 29. $-12 + 11$ _____ | 30. $2 + (-10)$ _____ |