

Reteaching 1-5

Subtracting Real Numbers

OBJECTIVE: Subtracting integers and decimals

MATERIALS: None

Review the following subtraction rules.

- To subtract a number, rewrite the problem to add the opposite of the number.
- Follow the rules for addition of numbers.

Example

The following example shows you step by step how to subtract two numbers.

$$\begin{array}{l}
 5 - 11 \\
 5 + (-11) \quad \leftarrow \text{Rewrite the problem to add the opposite of the number.} \\
 11 - 5 \quad \leftarrow \text{Find the difference of their absolute values.} \\
 6 \quad \leftarrow \text{Subtract.} \\
 -6 \quad \leftarrow \text{Since } -11 \text{ has the greater absolute value, the answer takes the} \\
 \quad \quad \quad \text{negative sign.}
 \end{array}$$

Exercises

Simplify. Be sure to check the sign of your answer.

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|--------------------|-------------------|---------------------|------------------|
| 1. $7 - 12$ | 2. $6 - 9$ | 3. $4 - (-5)$ | 4. $7 - (-3)$ |
| 5. $-6 - 4$ | 6. $-7 - 2$ | 7. $-5 - (-4)$ | 8. $-3 - (-10)$ |
| 9. $-3.1 - (-5.4)$ | 10. $8.3 - 5.1$ | 11. $-7.8 - 6.6$ | 12. $-4.8 - 2.5$ |
| 13. $8.7 - 2.5$ | 14. $-4.6 - (-3)$ | 15. $-9.3 - (-8.1)$ | 16. $-9.9 - 3.8$ |

Evaluate each expression for $a = -4$ and $b = 3$.

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|--------------|--------------|----------------|------------------|
| 17. $a - b$ | 18. $-a - b$ | 19. $a - (-b)$ | 20. $-a - (-b)$ |
| 21. $3b - a$ | 22. $- b $ | 23. $ a - b $ | 24. $ a - 3 b $ |

Subtract. (Hint: Subtract corresponding elements.)

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|---|---|
| 25. $\begin{bmatrix} -3 & -2 \\ 0 & 1 \end{bmatrix} - \begin{bmatrix} 3 & 1 \\ 2 & 4 \end{bmatrix}$ | 26. $\begin{bmatrix} \frac{1}{2} \\ -1 \end{bmatrix} - \begin{bmatrix} \frac{2}{3} \\ -3 \end{bmatrix}$ |
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