

Reteaching 1-4

Adding Real Numbers

OBJECTIVE: Adding integers and decimals

MATERIALS: None

Review the following addition rules.

- To add two numbers with the same sign, *add* their absolute values. The sum has the same sign as the numbers.
- To add two numbers with different signs, find the *difference* of their absolute values. The sum has the same sign as the number with the greater absolute value.

Example

The following example shows you step by step how to add two numbers with different signs.

$$-6 + 2$$

$$6 - 2 \leftarrow \text{Find the difference of their absolute values.}$$

$$4 \leftarrow \text{Subtract.}$$

$$-4 \leftarrow \text{Since } -6 \text{ has the greater absolute value, the answer takes the negative sign.}$$

Exercises

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

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|--------------------|---------------------|---------------------|------------------|
| 1. $-3 + (-4)$ | 2. $12 + 5$ | 3. $-5 + 8$ | 4. $-8 + (-2)$ |
| 5. $-2 + (-3)$ | 6. $9 + (-12)$ | 7. $-3 + 5$ | 8. $-4 + 3$ |
| 9. $-2.3 + (-1.5)$ | 10. $4.5 + 3.1$ | 11. $-5.1 + 2.8$ | 12. $13.9 + 7.3$ |
| 13. $1.3 + (-1.1)$ | 14. $-3.6 + (-6.7)$ | 15. $1.4 + (-21.4)$ | 16. $-9.8 + 3.5$ |

Evaluate each expression for $a = 5$ and $b = -4$.

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|-----------------|--------------|-------------|----------------|
| 17. $-a + (-b)$ | 18. $-a + b$ | 19. $a + b$ | 20. $a + (-b)$ |
|-----------------|--------------|-------------|----------------|

Evaluate each expression for $h = 3.4$.

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|---------------|----------------|------------------|-------------------|
| 21. $2.5 + h$ | 22. $-2.5 + h$ | 23. $2.5 + (-h)$ | 24. $-2.5 + (-h)$ |
| 25. $h + 7.1$ | 26. $-h + 7.1$ | 27. $h + (-7.1)$ | 28. $-h + (-7.1)$ |