

1-4**Study Guide and Intervention**

7NS1.2, 7AF1.3

Adding Integers

To add integers with the same sign, add their absolute values. The sum has the same sign as the integers.

Example 1 Find $-3 + (-4)$.

$$-3 + (-4) = -7 \quad \text{Add } |-3| + |-4|. \text{ Both numbers are negative, so the sum is negative.}$$

To add integers with different signs, subtract their absolute values. The sum has the same sign as the integer with the greater absolute value.

Example 2 Find $-16 + 12$.

$$-16 + 12 = -4 \quad \text{Subtract } |12| \text{ from } |-16|. \text{ The sum is negative because } |-16| > |12|.$$

Exercises**Add.**

1. $9 + 16$

2. $-10 + (-10)$

3. $18 + (-26)$

4. $-23 + (-15)$

5. $-45 + 35$

6. $39 + (-38)$

7. $-55 + 81$

8. $-61 + (-39)$

9. $-74 + 36$

10. $5 + (-4) + 8$

11. $-3 + 10 + (-6)$

12. $-13 + (-8) + (-12)$

13. $3 + (-10) + (-16) + 11$

14. $-17 + 31 + (-14) + 26$

Evaluate each expression if $x = 4$ and $y = -3$.

15. $11 + y$

16. $x + (-6)$

17. $y + 2$

18. $|x + y|$

19. $|x| + y$

20. $x + |y|$