LESSON 1.6

# Subtracting Integers

| BEFORE | Now | WHY? |
| --- | --- | --- |
| You subtracted decimals. | You'll subtract integers. | So you can find the difference in road elevations, as in Ex. 11. |

**Review Vocabulary**

opposite, p. 23

difference, p. 747

## Subtracting Integers

**Words** To subtract an integer, add its opposite.

**Numbers** $3 - 7 = 3 + (-7) = -4$ **Algebra** $a - b = a + (-b)$

$8 - 3 = 5$

$10 - -4$

$10 + 4 = 14$

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$-10 - -4$

$-10 + 4 = -6$

LESSON 1.6

Name _____ Date _____

# Practice A

For use with pages 34–38

**Find the difference.**

**1.** $6 - 9$

$6 - 9$

$6 + -9$

$-3$

**2.** $11 - 15$

**3.** $3 - (-7)$

$3 - -7$

$3 + 7$

$10$

**4.** $5 - (-12)$ **5.** $-8 - 4$ **6.** $-13 - 2$

$-8 - 4$

$-8 + -4$

$-12$

**7.** $-1-(-10)$ **8.** $-7-(-5)$ **9.** $-14-(-3)$

$-1--10$

$-1+10$

$9$

$-14--3$

$-14+3$

$-11$

**Evaluate the expression when $m = -5$ and $n = -7$.**

**10.** $m - 9$ **11.** $-8 - m$ **12.** $n - 6$

$-8 - -5$

$-8 + 5$

$-3$

**13.** $m - n$

$-5 - -7$

$-5 + 7$

$2$

**14.** $n - 11$

**15.** $12 - m$

$12 + -15$

$12 + 5$

$17$

**Find the change in temperature or elevation.**

**16.** From −14°C to 5°C

**17.** From −21°C to −3°C

**18.** From −7°F to 16°F

**19.** From −12°F to 32°F

$-3 - -21$

$-3 + 21$

$18$

$25 \to 27$

$-8 \to 32$

$32 - -12$

$32 + 12$

$44$

**20.** From −80 feet to −45 feet

**21.** From −37 yards to 15 yards

**22.** From 24 meters to −8 meters

**23.** From −13 meters to −21 meters

$15 - -37$

$15 + 37$

$52$

$-13 \Rightarrow -21$

$-21 - -13$

$-21 + 13$

$-8$

**24.** Find the value of the expression $-6 - (-12) - 4$.

**25.** Find the value of the expression $9 - 16 - (-8)$.

$9 + -16 - -8$

$9 + -16 + 8$

$-7 + 8$

$1$

**26.** In one day, the temperature rose from $-9°F$ to $15°F$. Find the temperature change.

**27.** An airplane moves from its cruising altitude of 36,000 feet to an altitude of 29,875 feet. What is the change in altitude?

$29875 + -36000$

$-6125$

**28.** At 6 A.M., the outside temperature is 32°F. Starting at 8 A.M., you record the temperature every 2 hours. At the first recording, the temperature drops 3°F, at the second recording, the temperature drops an additional 5°F. At the third and final recording, the temperature drops an additional 2°F. What is the temperature after the final recording?

$32 - 3 - 5 - 2$

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