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** $a - b = a + (-b)$

$8 - 3 = 5$

$10 - -4$

$10 + 4 = 14$

$-10 - -4$

$-10 + 4 = -6$

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. $12 - m$

$12 + -15$

$12 + 5$

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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

$25 \to 27$

$-8 \to 32$

$32 - -12$

$32 + 12$

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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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