2-2 Practice

Adding Integers

Find each sum.

1. −19 + (−7)   **2.** −29 + 30   **3.** −32 + 9   **4.** 10 + 37

5. 34 + 22   **6.** −16 + (−28)   **7.** −4 + (−50)   **8.** −12 + (−63)

9. 26 + (−9)   **10.** −17 + (−23)   **11.** 12 + (−22)   **12.** 18 + (−56)

13. −36 + (−36) **14.** −54 + 45   **15.** −34 + 17   **16.** −16 + (−24)

17. 70 + (−108) **18.** −52 + 36   **19.** −71 + (−86) **20.** −39 + (−40)

21. 25 + 18 + (−25)   **22.** −65 + (−2) + 9   **23.** 80 + 15 + (−26)

24. −5 + 4 + (−27)   **25.** −29 + 29 + 44   **26.** −1 + (−8) + (−49)

27. −16 + (−56) + (−90) **28.** −18 + 13 + (−35)   **29.** 10 + (−34) + 34

30. 30 + (−9) + 1   **31.** −24 + 7 + (−7)   **32.** 51 + (−21) + (−12)

33. TEMPERATURE At 4:00 A.M., the outside temperature was −28°F. By 4:00 P.M. it rose 38 degrees. What was the temperature at 4:00 P.M.?

34. HEALTH Three friends decided to exercise together four times a week to lose fat and increase muscle mass. While all three were healthier after six weeks, one had lost 5 pounds, another had gained 3 pounds, and one had lost 4 pounds. What was the total number of pounds gained or lost by the three friends?

35. ROLLER COASTERS The latest thrill ride at a popular theme park takes roller coaster fans on an exciting ride. In the first 20 seconds, it carries its passengers up a 100-meter hill, plunges them 72 meters down, and quickly takes them back up a 48-meter rise. How much higher or lower from the start of the ride are they after these 20 seconds?

2-3 Practice

Subtracting Integers

Find each difference.

1. $-26 - (-30)$

2. $25 - 32$

3. $-18 - 54$

4. $59 - (-19)$

5. $-41 - (-19)$

6. $-20 - 13$

7. $31 - (-56)$

8. $15 - (-40)$

9. $-32 - 28$

10. $10 - (-23)$

11. $-14 - 64$

12. $-12 - (-36)$

13. $-81 - 4$

14. $9 - 30$

15. $-44 - (-21)$

16. $140 - (-9)$

Evaluate each expression if $a = -11$, $b = 8$, and $c = -6$.

17. $a - 17$

18. $10 - b$

19. $-30 - c$

20. $b - a$

21. $a - b$

22. $c - b$

23. $b - c + a$

24. $b - c - a$

25. $c - a - b$

26. $b + a - c$

27. $b + c - a$

28. $c - a + b$

29. $a - b + c$

30. $b - a + c$

31. $a - b - c$

32. $c + b - a$

33. $c - b + a$

34. $a + b - c$

35. $16 + a + c$

36. $a - b + 14$

37. ELEVATORS Linda entered an elevator on floor 9. She rode down 8 floors. Then she rode up 11 floors and got off. What floor was she on when she left the elevator?

38. INVESTMENTS The NASDAQ lost 36 points on a Monday, but rebounded the next day, gaining 24 points. What was the total change in points?

39. OFFICE BUILDINGS Randi takes the stairs at work whenever possible instead of the elevator. She must climb up 51 steps from her office to get to the accounting department. The human resources department is 34 steps below her office. How many steps are there between human resources and accounting?