

Chapter Test

Evaluate the expression when $y = 16$ and $z = 4$.

1. $y + 9$

2. $11 - z$

3. $\frac{y}{z}$

4. yz

Write the power in words and as a repeated multiplication. Then evaluate the power.

5. 8^2

6. 2^7

7. $(0.2)^5$

8. $(0.7)^4$

9. **Sewing** You are making a beanbag footstool in the shape of a cube with an edge length of 50 centimeters. In order to fill the footstool with plastic beads, you need to know its volume. Find the volume of the footstool.

Evaluate the expression.

10. $70.2 + 4(3.5)$

11. $\frac{75 - 39}{4 \cdot 3}$

12. $90 \div 5 + 4$

13. $18 + 30 \div 6$

Evaluate the expression when $r = 4$ and $s = 6$.

14. $3.5s + r$

15. $(r + 1)^2 - s$

16. $4r + s^2$

17. $2(r^2 - 15)$

State the absolute value and the opposite of the number.

18. -78

19. 121

20. -33

21. 19

Find the sum or difference.

22. $35 + (-11)$

23. $-28 + (-40)$

24. $-38 + (-8)$

25. $43 + (-22)$

26. $5 - (-16)$

27. $-60 - 7$

28. $-19 - 35$

29. $-48 - (-72)$

Find the product or quotient.

30. $-20(32)$

31. $\frac{-76}{4}$

32. $-25(-30)$

33. $840 \div (-24)$

34. $18(-4)$

35. $700 \div (-35)$

36. $-12(-16)$

37. $\frac{-270}{-18}$

38. **Investments** The integers below represent the monthly gains and losses in the value of an investment over one year. Find the mean of the integers.

$-\$190, \$75, -\$65, \$100, \$72, -\$54, -\$62, -\$87, \$92, \$81, -\$73, \63

39. **Geometry** Plot the points listed below in the same coordinate plane. Describe any pattern you see in the graph.

$(-3, -6), (-2, -5), (-1, -4), (0, -3), (1, -2), (2, -1)$