

Algebra--Chapter 1 Test Review**Multiple Choice**

Identify the letter of the choice that best completes the statement or answers the question.

Write an algebraic expression for the phrase.

- _____ 1. the sum of b and 11
 a. $b - 11$ b. $\frac{b}{11}$ c. $b + 11$ d. $11b$
- _____ 2. 4 times the sum of q and p
 a. $4q + p$ b. $4 + q + p$ c. $4qp$ d. $4(q + p)$
- _____ 3. What equation models the data in the table if d = number of days and c = cost?

Days	Cost
2	44
3	66
5	110
6	132

- a. $d = 22c$ b. $c = 22d$ c. $c = d + 22d$ d. $c = d + 22$
- _____ 4. Evaluate $u + xy$, for $u = 18$, $x = 10$, and $y = 8$.
 a. 188 b. 36 c. 98 d. 224
- _____ 5. Evaluate the expression $(ab)^2$ for $a = 4$ and $b = 3$.
 a. 36 b. 24 c. 81 d. 144
- _____ 6. You can use the formula $C = \frac{5}{9}(F - 32)$ to convert temperature in degrees Fahrenheit, F , to temperature in degrees Celsius, C . What is 62°F in degrees Celsius? Round your answer to the nearest tenth.
 a. 30°C b. 16.7°C c. 52.2°C d. 2.4°C
- _____ 7. Evaluate $|-x - 2y|$ for $x = -2$ and $y = 3$.
 a. 4 b. 8 c. -4 d. -8

Simplify the expression.

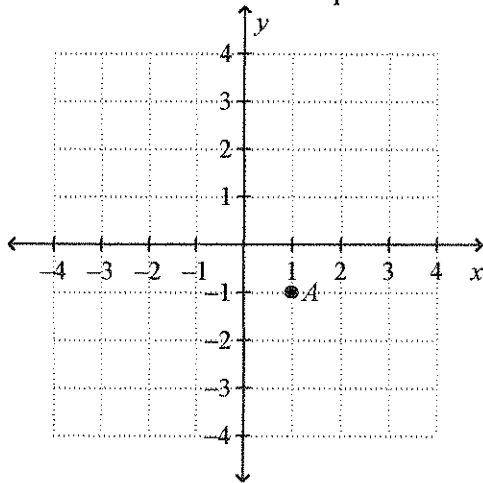
- _____ 8. $3[(15 - 3)^2 \div 4]$
 a. 108 b. 36 c. 18 d. 9
- _____ 9. $4(20 + 12) \div (4 - 3)$
 a. 29 b. 80 c. 128 d. 92
- _____ 10. $-9 + 6$
 a. 15 b. -3 c. -15 d. 3
- _____ 11. $-4.8 - (-4.9) + 5.7$
 a. -4 b. -5.8 c. 5.8 d. -15.4

- _____ 12. $\begin{bmatrix} 5.9 & -18 \\ 18 & -4.2 \end{bmatrix} + \begin{bmatrix} -3.7 & 3 \\ -9 & 3.9 \end{bmatrix}$
- a. $\begin{bmatrix} 2.2 & -15 \\ 9 & -0.3 \end{bmatrix}$ b. $\begin{bmatrix} -2.2 & 27 \\ 0.09 & 0.7 \end{bmatrix}$ c. $\begin{bmatrix} 23.9 & -21.7 \\ 13.8 & -13.2 \end{bmatrix}$ d. $\begin{bmatrix} 23.9 & -21 \\ 27 & -8.1 \end{bmatrix}$
- _____ 13. $|18 - 6|$
- a. 13 b. -13 c. 12 d. -12
- _____ 14. $-6.5(-4.9)$
- a. -16.25 b. -31.85 c. -12.25 d. 31.85
- _____ 15. -5^4
- a. 20 b. 125 c. -625 d. 625
- _____ 16. $\frac{1}{2}(-12m + 38)$
- a. $-6m + 38$ c. $-6m + 76$
 b. $-24m + 19$ d. $-6m + 19$
- _____ 17. $(-5 - c)(-1)$
- a. $-5 + c$ b. $5 + c$ c. $5 - c$ d. $-5 - c$
- _____ 18. $1.7m^2 + 6.5n - 4n + 2.5m^2 - n$
- a. $4.2m^2 + 1.5n$ c. $1.5m^2 - 4.2n$
 b. $4.2m^2 - 1.5n$ d. $1.5m^2 + 4.2n$
- _____ 19. $\frac{(-9)(-8)}{(-2)}$
- a. 36 b. -72 c. 72 d. -36
- _____ 20. $\frac{1}{3}n(-6 + 27m - 51p)$
- a. $-18n + 81mn - 153np$ c. $-2n + 9mn - 17np$
 b. $-2n + 9m - 17p$ d. $-2n - 9mn + 17np$
- _____ 21. Evaluate the formula $V = \frac{Bh}{3}$ for $B = 9 \text{ in.}^2$ and $h = 32 \text{ in.}$
- a. 288 in.^3 b. 9.6 in.^3 c. 32 in.^3 d. 96 in.^3
- _____ 22. Name the set(s) of numbers to which 1.68 belongs.
- a. rational numbers
 b. natural numbers, whole numbers, integers, rational numbers
 c. rational numbers, irrational numbers
 d. none of the above
- _____ 23. Name the set(s) of numbers to which -5 belongs.
- a. whole numbers, natural numbers, integers
 b. rational numbers
 c. whole numbers, integers, rational numbers
 d. integers, rational numbers

- _____ 24. Write $\frac{1}{6}, \frac{5}{3}, -\frac{5}{6}$ in order from least to greatest.
- a. $-\frac{1}{6}, -\frac{5}{6}, \frac{5}{3}$ b. $-\frac{1}{6}, \frac{5}{3}, -\frac{5}{6}$ c. $\frac{5}{3}, -\frac{5}{6}, -\frac{1}{6}$ d. $-\frac{5}{6}, -\frac{1}{6}, \frac{5}{3}$
- _____ 25. $|-2.8|$
- a. 2.8 b. -2.8
- _____ 26. $-10z - 28z$
- a. $38z$ b. $-38z$ c. 18 d. $18z$

Name the property the equation illustrates.

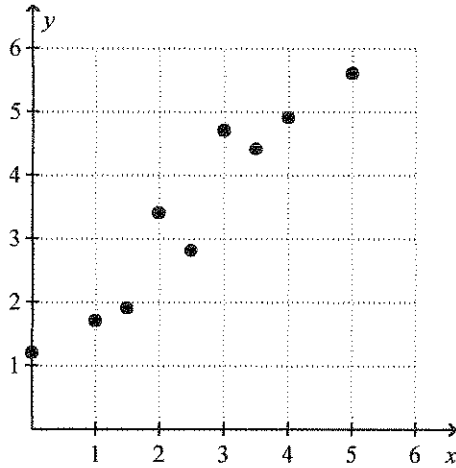
- _____ 27. $8 + 3.4 = 3.4 + 8$
- a. Inverse Property of Addition
 b. Associative Property of Addition
 c. Commutative Property of Addition
 d. Inverse Property of Multiplication
- _____ 28. $7 + (4 + 4) = (7 + 4) + 4$
- a. Inverse Property of Addition
 b. Associative Property of Addition
 c. Commutative Property of Multiplication
 d. Commutative Property of Addition
- _____ 29. What are the coordinates of point A?



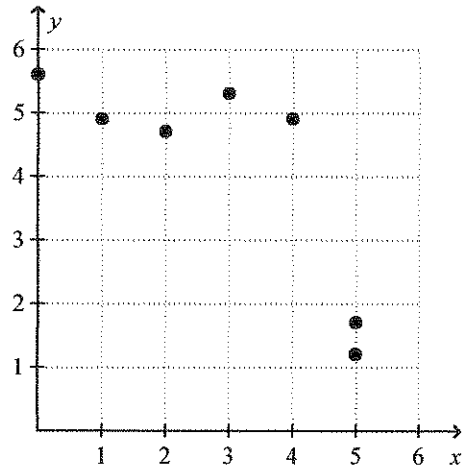
- a. (-1, 1) b. (1, 1) c. (-1, -1) d. (1, -1)
- _____ 30. In which quadrant or on which axis would you find the point $(-2, -4)$?
- a. Quadrant III b. Quadrant II c. Quadrant IV d. y-axis

_____ 31. Which of the scatter plots shows a positive correlation?

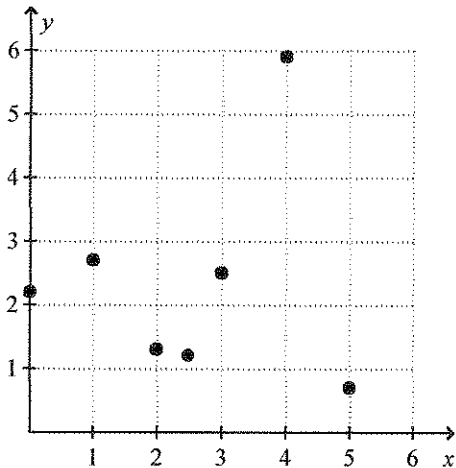
a.



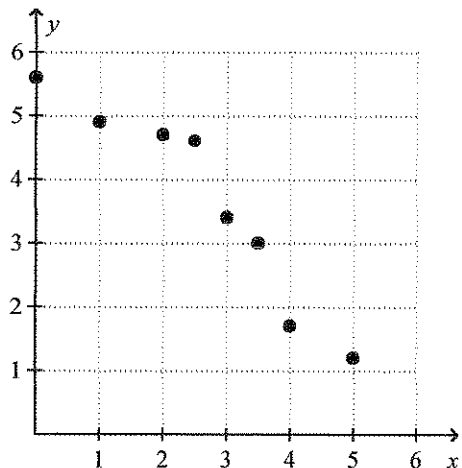
c.



b.



d.



_____ 32. You made two deposits to your bank account this month. One deposit was \$10.27, and the second deposit was \$20.36. Your balance at the end of the month is \$72.31, and you made no withdrawals. Write and evaluate an expression for your balance at the beginning of the month.

- a. $\$72.31 + (\$10.27 - \$20.36)$; \$62.22
- b. $\$72.31 - (\$10.27 - \$20.36)$; \$82.40
- c. $\$72.31 - \$10.27 - \$20.36$; \$41.68
- d. $\$72.31 + \$10.27 + \$20.36$; \$102.94