

Algebra 1 Chapter 1 and 2 Test Review

- **Review for Chapter 1 and 2 is due on the day of the test.**
- **Review will not be graded unless answers are written on separate paper.**
- **A retest eligibility requirement: this review must be complete, accurate, and turned in.**
- **NO WORK NO CREDIT!!**

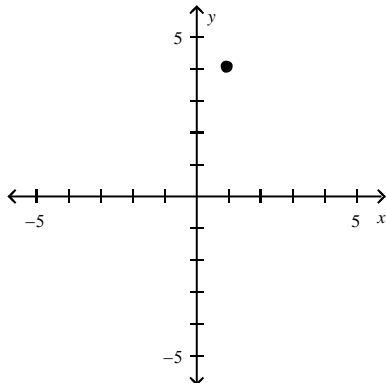
1. Julia wrote 14 letters to friends each month for y months in a row. Write an expression to show how many total letters Julia wrote. If Julia wrote letters for 6 months, how many letters would she have written?
2. Salvador's class has collected 88 cans in a food drive. They plan to sort the cans into x bags, with an equal number of cans in each bag. Write an expression to show how many cans there will be in each bag. If there are 8 bags, how many cans will there be in each bag?
3. Evaluate the expression $q - v$ for $q = 5$ and $v = 1$.
4. Juan scored 24 points in the first half of the basketball game, and he scored p points in the second half of the game. Write an expression to determine the number of total points he scored. Then, find the number of points he scored in all if he scored 11 points in the second half of the game.
5. Laura charges \$3.00 dollars per hour plus a fee of \$10.00 for babysitting. Write an equation that models Laura's baby sitting charges. How much will Laura charge for $4\frac{1}{2}$ hours of sitting? Laura charged one family \$28.00. How long did she babysit?
6. Evaluate the expression $2m + n$ for $m = 7$ and $n = 9$.
7. Evaluate $x + (-9)$ for $x = 35$.
8. Evaluate $2 + x - 2 \cdot 8$ for $x = 9$.
9. Add. $34 + (-21)$
10. Subtract. $-5 - (-8)$
11. Carina hiked at Yosemite National Park for 1.75 hours. Her average speed was 3.5 mi/h. How many miles did she hike?
12. Simplify -5^2 .
13. Simplify $(-4)^2$.
14. Simplify $8 + 3[3 - (1)^6]$.
15. Simplify $3^4 + 12 \div 3 - (1 - 9)$.
16. Simplify the expression $\frac{2 + 4^2}{2} + |1 - 6|$.
17. Simplify by combining like terms.
 $3x^3 + 9z + 2x^3 + 5z + 6x^2$
18. Graph the point and identify the quadrant the point is located in (1, 4).
19. Graph the point and identify the quadrant the point is located in (-4, 0).
20. Graph the point and identify the quadrant the point is located in (-3, 3).
21. Graph the point (4, -2).
22. Solve for p : $p - 6 = 16$.
23. A toy company's total payment for salaries for the first two months of 2005 is \$21,894. Write and solve an equation to find the salaries for the second month if the first month's salaries are \$10,205.
24. Solve for q : $\frac{q}{5} = 41$.

Solve for the variable in the equations below (25 – 27 & 29 – 30) .

25. Solve $44 = 14 - 2a$. 26. Solve $\frac{f}{30} - \frac{4}{10} = \frac{1}{10}$. 27. Solve $43a + 10 - 26a = 27$.
28. Sara needs to take a taxi to get to the movies. The taxi charges \$4.00 for the first mile, and then \$2.75 for each mile after that. If the total charge is \$20.50, then how far was Sara's taxi ride to the movie?
29. Solve $50q - 43 = 52q - 81$. 30. Solve $n - 8 + n = 1 - 4n$.
31. A video store charges a monthly membership fee of \$7.50, but the charge to rent each movie is only \$1.00 per movie. Another store has no membership fee, but it costs \$2.50 to rent each movie. How many movies need to be rented each month for the total fees to be the same from either company?
32. A professional cyclist is training for the Tour de France. What was his average speed in miles per hour if he rode the 120 miles from Laval to Blois in 4.7 hours? Use the formula $d = rt$, and round your answer to the nearest tenth.
33. The formula for the resistance r of a conductor with voltage V and current I is: $r = \frac{V}{I}$. Solve for V .
34. A) Solve $4x - z = y$ for x . B) —
35. Translate the word phrases into variable expressions:
a) the sum of x and the product of 7 and -2
b) the quotient of 12 and the sum of x and 8
c) 7 less than a number
36. The perimeter of a polygon is 63 inches. The sides of the polygon are: $4x+6$, $x-5$, $2x-8$, and $3x$. Draw a picture and label the sides of the polygon. Write an equation that can be used to solve for x . Solve your equation for x .

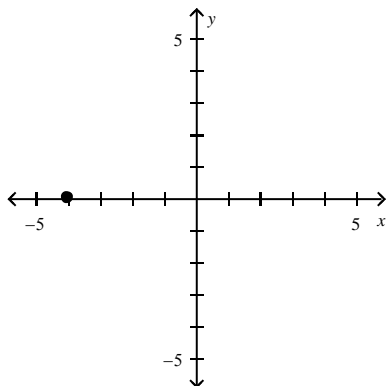
Algebra 1 Chapter 1 and 2 Test Review

1. ANS:
14y ; 84 letters STA:A.3.A
2. ANS: $\frac{88}{x}$; 11 cans per bag STA:A.3.A
3. ANS: 4 STA: A.3.A
4. ANS: $24 + p$; 35 points STA:A.3.A
5. ANS: $10 + 3\frac{1}{2} = c$, \$23.50, 6 hours
6. ANS: 23 STA: A.3.A
7. ANS: 26
8. ANS: -5
9. ANS: 13
10. ANS: 3
11. ANS: 6.125 mi
12. ANS: -25
13. ANS: 16
14. ANS: 14
15. ANS: 93
16. ANS: 14
17. ANS: $5x^3 + 14z + 6x^2$ STA:A.4.B
18. ANS:



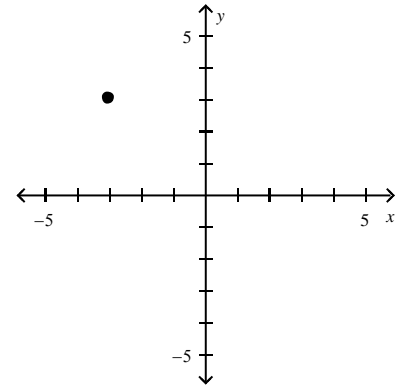
Quad I STA: A.4.B

19. ANS:



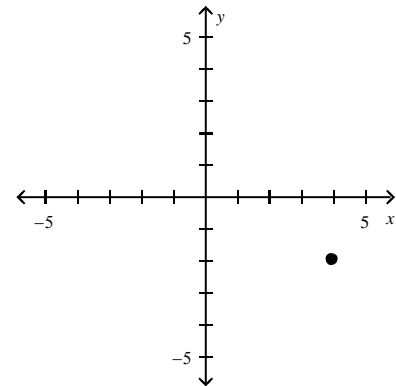
x-axis STA: A.4.B

20. ANS:



Quad II STA: A.4.B

21. ANS:



Quad IV STA: A.4.B

22. ANS: $p = 22$ STA: A.4.A
23. ANS: $10,205 + x = 21,894$
The salaries for the second month are
\$11,689. STA: A.7.A
24. ANS: $q = 205$ STA: A.4.A
25. ANS: $a = -15$ STA: A.4.A
26. ANS: $f = 15$ STA: A.4.A
27. ANS: $a = 1$ STA: A.4.A
28. ANS: 7 miles STA: A.7.A
29. ANS: $q = 19$ STA: A.4.A
30. ANS: $n = 1\frac{1}{2}$ STA: A.4.A
31. ANS: 5 movies STA: A.7.A
32. ANS: 25.5 mphS TA: A.4.A
33. ANS: $V = Ir$ STA: A.4.A

34. ANS: A) $x = \frac{y+z}{4}$ B)
STA: A.4.A

35. ANS: a) $x + 7(-2)$ b) $\frac{12}{x+3}$ c) $x - 7$

36. ANS:
 $4x + 6 + x - 5 + 2x - 8 + 3x = 63, \quad x=7$