

CP Algebra 1



Summer Assignment

Name: _____ Period: __

The purpose of this packet is to both convey to students the foundational skills needed to be successful in this course and to provide them an opportunity to self-assess and develop these skills prior to entering the class. In order to be successful in this and all subsequent math courses at Servite, students must master and retain the content and skills from all previous math courses. As such, we ask that you please work on this assignment with integrity and diligence always striving to meet the intended purpose and goal of this assignment.

Directions: Please print this packet. You **must show all work** in this packet in the space provided. You **may not** use a calculator. For every word problem, write your answer in the form of a sentence. After you make an honest attempt at a problem, check your answer. If your answer is incorrect, try to identify where you went wrong, review the topic, and redo the problem correctly.

This packet will be **collected** on the **second day** of school. You will be given a homework grade for completing this packet. Per Servite School policy, if this packet is not turned in on the second day of school, you will receive half credit if it is turned in the following day. After that, you will receive a zero for this packet. An assessment will be given at the beginning of the school year to make sure you have mastered all prerequisites. This assessment will count as a quiz grade.

Have a great summer and we are looking forward to seeing you in August!

I understand that I have to show all my work and cannot use a calculator.

(Student Signature)

(Date)

I have checked to see that my child have shown all work and completed all problems without the use of a calculator.

(Parent/Guardian Signature)

(Date)

**Skills
Test****Prerequisite Skills Test****Add or subtract.**

1. $-9 + (-15)$ 2. $2 + (-3)$ 3. $6 - 9$
4. $-6 - 11$ 5. $13 + 8$ 6. $-12 - (-10)$

Multiply or divide.

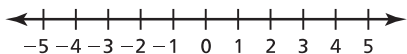
7. $2(-7)$ 8. $-8 \cdot 2$ 9. $9 \div 3$
10. $25 \div (-5)$ 11. $-30 \div (-6)$ 12. $-1(-7)$

Solve the problem and specify the units of measure.

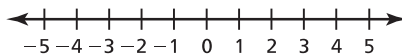
13. The length of a rectangle is 6 feet and the width is 3 feet. Find the perimeter of the rectangle.
14. One side of a square measures 9 centimeters. Find the area of the square.

Graph the number.

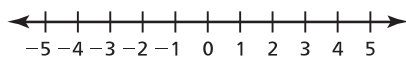
15. 4



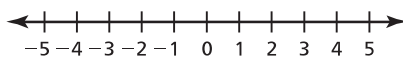
16. $|-3|$



17. $-6 + |5|$



18. $1 - |-3|$

**Complete the statement with $<$, $>$, or $=$.**

19. 3 ___ 7 20. -1 ___ 4
21. -4 ___ -10 22. $|-6|$ ___ -3

Evaluate the expression for the given value of x .

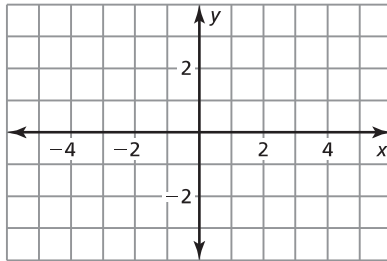
23. $2x - 6$; $x = 9$ 24. $-7 + 9x$; $x = 3$ 25. $12x + 13$; $x = 5$

**Skills
Test**
Prerequisite Skills Test (continued)

Evaluate the expression for the given value of x .

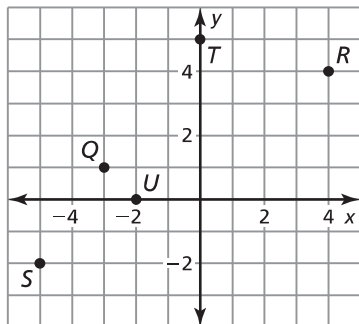
26. $-x - 12$; $x = 4$ 27. $13 - 7x$; $x = -10$ 28. $11x + 17$; $x = -6$

Plot the point in the coordinate plane. Describe the location of the point.



29. $A(4, 2)$ 30. $B(-1, 3)$ 31. $C(-5, -3)$ 32. $D(3, 0)$

Use the graph to answer the question.



33. Which ordered pair corresponds to point U ?
34. Which ordered pair corresponds to point S ?
35. Which point is located in Quadrant II?

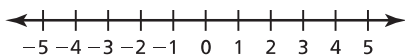
Solve the equation for y .

36. $2x - y = 3$ 37. $3x + 2y = -4$ 38. $-2x = 6y + 3$

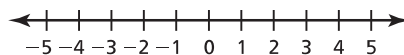
39. $0 = 7x - y + 12$ 40. $-2y + x = 4y - 6$

Solve the inequality. Graph the solution.

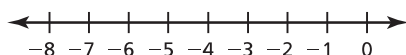
41. $p + 6 > 9$



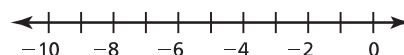
42. $3x - 4 < 2$



43. $-4m + 6 \leq 22$



44. $5x + 1 \leq 3x - 9$



**Skills
Test****Prerequisite Skills Test** (continued)**Evaluate the expression.**

45. $14 \div 7 - 2^2 + (-3) \cdot 2 - 1$

46. $-4 - (3 + 6^2) \div 13 - 1^2 \cdot (-12)$

Find the square root(s).

47. $\sqrt{25}$

48. $-\sqrt{81}$

49. $\pm\sqrt{9}$

50. $-\sqrt{144}$

Simplify the expression.

51. $7x - 1 + 2x$

52. $3m + 2 - 6m + 8 - 1$

53. $-4(2y - 1) + 3y - 7$

54. $3(d + 3) - (2d - 1) + 11d + 8$

Evaluate the expression when $x = -3$.

55. $3x^2 - 6$

56. $2x^2 - 6x + 1$

57. $-x^2 - 5x - 1$

58. $x^2 + 3x + 8$

59. $-2x^2 + 4x + 3$

60. $-3x^2 - 6 - x$

**Skills
Test****Prerequisite Skills Test** (continued)

Find the greatest common factor.

61. 45, 9

62. 64, 48

63. 25, 10

64. 29, 12

Evaluate the expression.

65. $3\sqrt{9} - 6$

66. $\frac{\sqrt{25}}{15} - 7$

67. $2\left(\frac{\sqrt{16}}{8} + 6\right)$

68. $-3(9 - \sqrt{100})$

Prerequisite Skills Test Item Analysis

Item Number	Skills
1	adding and subtracting integers
2	adding and subtracting integers
3	adding and subtracting integers
4	adding and subtracting integers
5	adding and subtracting integers
6	adding and subtracting integers
7	multiplying and dividing integers
8	multiplying and dividing integers
9	multiplying and dividing integers
10	multiplying and dividing integers
11	multiplying and dividing integers
12	multiplying and dividing integers
13	specifying units of measure
14	specifying units of measure
15	graphing numbers on a number line
16	graphing numbers on a number line
17	graphing numbers on a number line
18	graphing numbers on a number line
19	comparing real numbers
20	comparing real numbers
21	comparing real numbers
22	comparing real numbers

Item Number	Skills
23	evaluating expressions
24	evaluating expressions
25	evaluating expressions
26	evaluating expressions
27	evaluating expressions
28	evaluating expressions
29	plotting points
30	plotting points
31	plotting points
32	plotting points
33	using a graph
34	using a graph
35	using a graph
36	rewriting equations
37	rewriting equations
38	rewriting equations
39	rewriting equations
40	rewriting equations
41	solving/graphing inequalities
42	solving/graphing inequalities
43	solving/graphing inequalities
44	solving/graphing inequalities

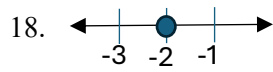
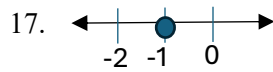
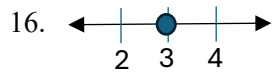
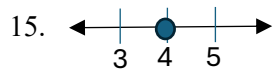
Prerequisite Skills Test Item Analysis (continued)

Item Number	Skills
45	using order of operations
46	using order of operations
47	finding square roots
48	finding square roots
49	finding square roots
50	finding square roots
51	simplifying algebraic expressions
52	simplifying algebraic expressions
53	simplifying algebraic expressions
54	simplifying algebraic expressions
55	evaluating expressions
56	evaluating expressions
57	evaluating expressions
58	evaluating expressions
59	evaluating expressions

Item Number	Skills
60	evaluating expressions
61	finding the greatest common factor
62	finding the greatest common factor
63	finding the greatest common factor
64	finding the greatest common factor
65	evaluating expressions involving square roots
66	evaluating expressions involving square roots
67	evaluating expressions involving square roots
68	evaluating expressions involving square roots

CP Algebra 1 Summer Assignment – Answer Key

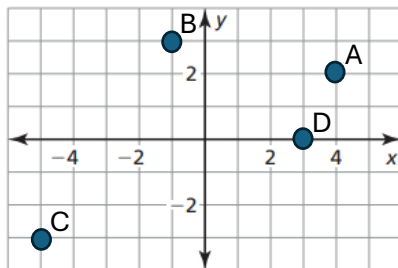
1. -24
2. -1
3. -3
4. -17
5. 21
6. -2
7. -14
8. -16
9. 3
10. -5
11. 5
12. 7
13. 18 ft
14. 81 cm²



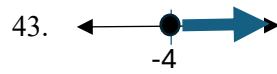
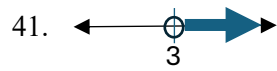
19. <
20. <
21. >
22. >
23. 12
24. 20
25. 73

26. -16
27. 83
28. -49

29. - 32.



- 33. $(-2,0)$
- 34. $(-5,-2)$
- 35. Q
- 36. $y = 2x - 3$
- 37. $y = -3x/2 - 2$
- 38. $y = -x/3 - 1/2$
- 39. $y = 7x + 12$
- 40. $y = x/6 + 1$



- 45. -9
- 46. 5
- 47. 5
- 48. -9
- 49. $\{3, -3\}$
- 50. -12
- 51. $9x - 1$
- 52. $-3m + 9$
- 53. $-5y - 3$
- 54. $12d + 18$
- 55. 21
- 56. 37
- 57. 5
- 58. 8
- 59. -27
- 60. -30
- 61. 9
- 62. 16
- 63. 5
- 64. \emptyset
- 65. 3
- 66. $-20/3$
- 67. 13
- 68. 3