

CCGPS ALGEBRA SUMMER PACKET

NAME _____

Round the following numbers to the thousandth place.

1. 16,579.1256 _____

2. 34.876 _____

3. 1,456.1289123 _____

4. -235.4575 _____

5. 76,411.0005111 _____

6. -0.222226 _____

Round the following to the tenth place.

7. 45.235 _____

8. 100.033 _____

9. 12,457.350 _____

10. 5.159 _____

11. 0.34799 _____

12. -444.63 _____

Round to the hundred's place.

13. -436.45 _____

14. 1,289.444 _____

15. 1,999.999 _____

16. 298.005 _____

Perform the following arithmetic operations. Leave your answer as a reduced improper fraction ($\frac{15}{2}$). NO DECIMALS (2.5), NO MIXED NUMBERS ($3\frac{1}{2}$).

17. $\frac{13}{2} + \frac{3}{2} =$ _____

18. $\frac{21}{5} + \frac{46}{5} =$ _____

19. $\frac{53}{17} - \frac{87}{17} =$ _____

20. $\frac{-36}{7} - \frac{81}{7} =$ _____

21. $\frac{14}{2} - \frac{15}{8} =$ _____

22. $\frac{18}{5} + \frac{12}{7} =$ _____

23. $\frac{49}{2} + \frac{-10}{3} - \frac{7}{10} =$ _____

24. $15 + \frac{9}{5} - \frac{12}{45} =$ _____

25. $\frac{9}{5} \cdot \frac{12}{45} =$ _____

26. $\frac{-4}{7} \cdot \frac{1}{19} \cdot 133 =$ _____

27. $\frac{7}{9} \div \frac{147}{162} =$ _____

28. $-15 \div \frac{-5}{13} =$ _____

Simplify the following:

29. $(21)(2) + (-2)(-21) =$ _____

30. $(-2) - (-4) \div (-2) + 6 \cdot 0 =$ _____

31. $|6 - 8 \cdot 4 + 2| =$ _____

32. $-|21 - 28| =$ _____

33. $(-3) \div (-1) + 5 - 12 =$ _____ 34. $|-(5-9)| =$ _____

35. $3(-1 + -2 + -3 + -4) =$ _____ 36. $-|-2(-3 + -4)| =$ _____

37. $(-3 + -8)(-1 - -7) + 7 =$ _____ 38. $0(-8 - 2)(-1 + -6) =$ _____

39. $|0| =$ _____ 40. $(42 - 52) - (51 - 2) =$ _____

41. $-(10 + 3)^2 - (2 - 8) \div 3 \cdot \frac{5}{7} =$ _____

42. $7(2 - 5)^3 + (7 - 1)^2 - 14 \div 2 =$ _____

Insert the correct symbol: < , = or >

43. $-|5-8|$ _____ $|5-8|$ 44. $-21 + 17 - 5(8 - 3)$ _____ $|6-12-4|$

45. $-(-2)^3 + 4$ _____ $(-3)^3 + 24$ 46. $(-2)(-5)$ _____ $-|10 \bullet 1|$

47. $(6) + -8 - 4 \div 2$ _____ $\left| \frac{-21}{7} \right| - 8$ 48. $\frac{144}{-12} + 6 \bullet 3 + -5$ _____ 0

Solve the following for x. Leave answers as simplified improper fractions.

49. $3(x - 2) = -3$ _____ 50. $2(x + 5) = -2$ _____

51. $\frac{x}{3} + 5 = 9$ _____ 52. $0 = \frac{y}{6} + 8$ _____

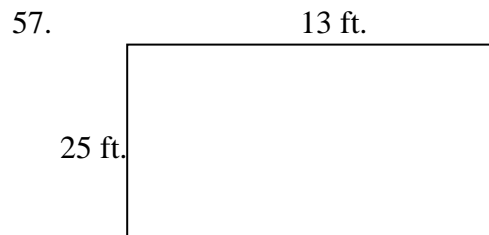
53. $\frac{5}{8}x = 7$ _____

54. $-19 - 6(w - 8) = 35$ _____

55. $1 - \frac{n}{5} = 12$ _____

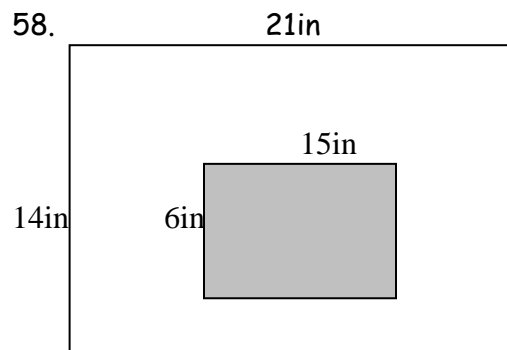
56. $n - \frac{2n}{5} = 12$ _____

Find the area and perimeter of the following. Indicate units of measure.



Area = _____

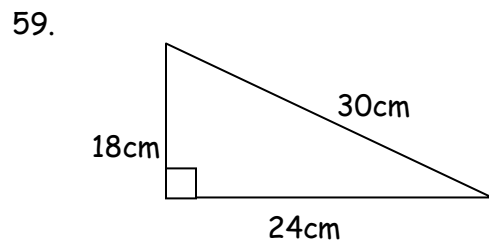
Perimeter = _____



Area of Shaded Area = _____

Area of non - shaded Area = _____

Perimeter of Shaded Area = _____



Perimeter = _____

Area = _____

Write the following words as algebraic expressions.

60. two less than a number _____

61. a number plus 12 _____

62. five times a number _____

63. a number subtracted from 12 _____

64. one-half the cube of a number _____

65. five increased by three times a number _____

66. 20 less than eight times a number _____

Solve the following problems:

67. Joanie wants to make a casserole for dinner on Sunday night. The recipe calls for The following ingredients:

2 pounds of hamburger	$\frac{2}{3}$ cup of chopped onion
$\frac{1}{2}$ tablespoons of ketchup	$\frac{5}{4}$ cup of cooked rice
$\frac{3}{8}$ cup of condensed cream of mushroom soup	$\frac{2}{5}$ cup of shredded cheese

The recipe made enough food for 8 people, but she only wanted to make enough for 4. Rewrite the ingredients needed for her recipe for 4 people.

_____ pounds of hamburger _____ cup of chopped onion

_____ tablespoons of ketchup _____ cup of cooked rice

_____ cup of condensed cream of mushroom soup _____ cup of shredded cheese

68. Jim is building bird houses. In order to make 15 bird houses, he buys the following items:

14 pieces of wood 6 inches by 1 inch by 7 feet

15 old license plates for the roof

$\frac{3}{5}$ of a package of nails

$\frac{1}{6}$ of a package of screws

$\frac{1}{2}$ gallon of paint

Jim has 2 friends who want to work with him to make bird houses. He figures that they should each make 15 bird houses for a total of 45 bird houses. What should his material list look like now?

_____ pieces of wood 6 inches by 1 inch by 7 feet

_____ old license plates for the roof

_____ of a package of nails _____ of a package of screws

_____gallon of paint

Your packet should be complete and will be collected by your teacher on the first day of school. Enjoy your time off!!