

Algebra 1
Summer Assignment

Name: _____

Date: _____

Hour: _____

Directions: Please circle your final answers. Show all work.
This assignment is due the first day of school.

Perform the indicated operation

1. $12 \cdot 5$

2. $5 + (-9)$

3. $7 - (-3)$

4. $-7 \cdot 7$

5. $-63 \div 9$

6. $14 + 17$

7. $(-8) \cdot (-3)$

8. $-8 \div -2$

Write the fraction in simplest form.

9. $\frac{24}{40}$

10. $\frac{6}{33}$

11. $\frac{36}{63}$

12. $\frac{36}{6}$

Combine the two fractions. Be sure to have common denominators. Simplify final answer.

13. $\frac{5}{12} + \frac{6}{12}$

14. $\frac{3}{5} - \frac{1}{5}$

15. $\frac{7}{3} + \frac{4}{3}$

16. $\frac{5}{7} - \frac{5}{7}$

17. $\frac{8}{3} + \frac{1}{6}$

18. $\frac{3}{4} - \frac{1}{2}$

19. $\frac{3}{5} + \frac{7}{10}$

20. $\frac{4}{3} - \frac{3}{5}$

Multiply or divide the two fractions. Simplify final answer.

$$21. \frac{2}{3} \cdot \frac{3}{5}$$

$$22. \frac{5}{6} \cdot \frac{1}{2}$$

$$23. \frac{5}{7} \cdot \frac{3}{5}$$

$$24. \frac{7}{2} \cdot \frac{3}{4}$$

$$25. \frac{1}{5} \div \frac{3}{2}$$

$$26. \frac{3}{5} \div \frac{2}{5}$$

$$27. \frac{3}{8} \div \frac{7}{4}$$

$$28. \frac{2}{9} \div \frac{3}{1}$$

Simplify the following by using order of operations.

$$29. 7^2 + 3^2$$

$$30. 8^2 + 6^2$$

$$31. 130 - (7 + 4)^2$$

$$32. 5 + \frac{2}{3}(7 + 8)$$

$$33. \frac{(5+4)^2}{3}$$

$$34. 130 - 7 + 4^2$$

$$35. 17 \div (5^2 - 8)$$

$$36. 2 + 9 \div 3 - 5$$

$$37. 15 \div 3 + 21 \div 7$$

Evaluate the expression. Simplify all answers.

38. $7x$ when $x = 5$

39. $\frac{12}{x}$ when $x = 6$

40. $3 + 5x$ when $x = 8$

41. $\frac{3}{2} + x$ when $x = \frac{5}{2}$

42. $1\frac{5}{6} + 2x$ when $x = \frac{1}{6}$

43. $3x^2$ when $x = 4$

Round the decimal to the indicated place value.

44. 9.5367, tenth

45. 3.0761, hundredth

46. 3.964, tenth

Identify the reciprocal of the following numbers

47. $\frac{3}{4}$

48. $-\frac{5}{3}$

49. $-\frac{1}{2}$

50. 7

Simplify the expression by combining like terms.

51. $5x + 7x$

52. $3x^2 + 2x - 5x^2 + 7x$

53. $6x + 4y - 4x + 3y$

54. $3x + 5 + 10$

55. $3x^2 + 6x + 7 - 2x$

56. $5y - 4y + 2 - 2$

Write the following fractions as percents

$$57. \frac{3}{4}$$

$$58. \frac{4}{5}$$

$$59. \frac{19}{20}$$

$$60. \frac{7}{10}$$