Algebra 1 Summer Assignment   Due: Wednesday, August 9ᵗʰ   Quiz: Friday, August 11ᵗʰ

Complete the following questions on loose-leaf. Write questions, show work, and box in the answer.

Simplify.

1. $-8 + 13$

2. $-47 - 13$

3. $-23(5)$

4. $-54 \div (-6)$

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

Evaluate each expression.

6. $30 - 14 \div 2$

7. $24 \div 6 - 2^3 * 4$

8. $-108 \div [3(9 + 3^2)]$

9.   Evaluate the expression if $g = 2$, $r = 3$, and $t = 11$.

$3g(g + r)^2 - 1$

10.   Evaluate the expression if $a = 8$, $b = 4$, and $c = 16$.

$\frac{2b+3c^2}{4a^2-2b}$

Solve the following equations.

11. $y + 17 = -42$

12. $x - 12 = 27$

13. $-34 + w = 77$

14. $54 + y = -13$

15. $\frac{5}{8} + x = \frac{7}{8}$

16. $3w + 7 = -8$

17. $8 = 16 + 8n$

18. $1 + \frac{r}{9} = 4$

19. $9x + 27 = -72$

20. $\frac{y}{4} - 6 = 8$

Write an algebraic expression for each variable expression.

21.   one third of a number

22.   three times the sum of a number and five

23.   ten less than the product of seven and f

34.   one minus the quotient of r and seven

25.   Destiny earns $8 per hour babysitting and $15 for each lawn she mows. Write an expression to show the amount of money she earns babysitting h hours and mowing m lawns.

Simplify each expression.

26. $2(x + 4)$

27. $\frac{1}{3}(6x - 27)$

28. $13r + 5r$

29. $7m + 7 - 5m$

30. $-3x + 7(3x + 4)$