**Algebra 1 Summer Assignment Due: Friday, August 14th Quiz: Monday, August 17th**

**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. $-54 ÷ (-6)$ 5. $\frac{3}{8} + \frac{1}{6}$

**Evaluate each expression.**

6. $30 - 14 ÷ 2$ 7. $24 ÷ 6 - 2^{3} \* 4$ 8. $- 108 ÷ \left[3\left(9+3^{2}\right)\right]$

9. Evaluate the expression if 10. Evaluate the expression if

*g* = 2, *r* = 3, and *t* = 11. *a* = 8, *b* = 4, and *c* = 16.

 $3g(g+r)^{2}-1$ $\frac{2b+3c^{2}}{4a^{2}-2b}$

**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. $\frac{1}{3}\left(6x-27\right)$ 28. $13r+5r$

29. $7m+7-5m$ 30. $-3x+7(3x+4)$