# Beverly Hills High School -- Algebra A -- Quest #2 -- Chapter 1 -- 75 points

**Always show your work**. Partial credit for partial performance. Pencils only. Be clear, complete and neat. All problems are three points unless specified otherwise. Always reduce fractions too.

Find each sum, difference, product, quotient or root as indicated. Simplify if possible.

1) $38 - 79 - 48 - 26 + 124 =$

2) $-7.63 + 8.29 + 24.58 - 12.63 =$

3) $42 - (-15) - 76 + 54 =$

4) $-5(6 - 3) + 7(3 + 8) =$

5) $|16 - 23| - |34 - 27| =$

6) $2|11 - 18| + |14 - (-22)| =$

7) $4(-9) =$

8) $(-5)(2)(-3) =$

9) $(-0.4)^2 =$

10) $\frac{8(-6)}{-16} =$

11) $\frac{-8}{15} \cdot \frac{5}{-4} =$

12) $\sqrt{.36}$

Use the Distributive Property to simplify each expression.

13) $-3(7x - 9) =$

14) $4(\frac{3}{2}n + \frac{1}{4}) =$

15) $-(4y - 3y^2 + 6) =$

Simplify each expression.

16) $-3xy^2 - 9x^2y + 6xy + 7xy^2 + 9x^2y =$

17) $-2(14 - 3z) + 4(2z + 9) - (6z - 9) =$

18) $\frac{12t - 30}{-6} =$

19) $\frac{63 - 56a}{-21} =$

20) Four points on this one. Is $(\frac{-3}{4}, -2)$ a solution to the equation $24x + 9y = 0$ ? Show why, yes or no. Whether it is or not, state another ordered pair that is a solution.

21) Four points on this one. Murgatroyd earns $18.25 an hour as a mechanic, fixing pickup trucks. Express this as both an equation and by using a table of values (at least four pair of values).

22) All bright women have class. Rhonda is a bright woman. Therefore, _____

_____. What kind of logic did you employ? _____.

Three points apiece. Determine what goes in the missing blank(s).

23) 12, 5, -2, -9, _____, _____

24) 18 - 6t, 36 - 4t, 72 - 2t, _____

25) $\frac{x + 2}{5}, \frac{4x + 5}{10}, \frac{7x + 8}{20}, \frac{10x + 11}{40}$, _____