

**Beverly Hills High School -- Algebra A -- Quest #3 -- Chapter 2 -- 75 points**

**ALWAYS SHOW YOUR WORK.** Partial credit for partial performance. Pencils only. Be clear, complete and neat. All problems are five points unless specified otherwise. Always state units and reduce fractions, too.

Solve all equations for x, y or z as indicated in each example.

1)  $-8x + 5 = -67$

2)  $\frac{-y}{3} + 2 = -4$

3)  $-4(z + 2) + 2(4 + 2z) = 0$

4)  $.4x - .2 = .8$

5)  $\frac{3y}{2} + \frac{1}{3} = 2$

6)  $8(9 + 2z) = 81 + 14z$

7)  $3(4 - 6x) = -12 - 20x$

8)  $\frac{3}{4}y - 6 = 4 + \frac{1}{2}y$

9)  $3z - 1 = \frac{z + 2}{2}$

10)  $2x - \frac{5}{6} = \frac{3}{5}$

11)  $2(y - 6) - 3(6 - y) = 4y$

12)  $-9z + 17 + 4z = -53$

13) Solve and check the following equation.

$$6n = 54 + 3n$$

14) Solve for k:

$$217 - 18k + 3(5k + 26) = -5$$

Solve for x.

15)  $5(x + 4) - 6x = -24$

EXTRA CREDIT -- All or Nothing.

16) Solve for a.

$$\frac{a}{x} - 2 = \frac{3a}{y}$$