Solving Equations Review Graded Assignment
(Honors Math 3)
SHOW ALL WORK!

Name: _____ Date: _____

I. Solve each equation. (4 points each)

1. $13 = 8 - 6x$
2. $4x - 9 = 7x + 12$
3. $-6 = \frac{4x}{7} + 2$
4. $\frac{3}{4} - \frac{1}{2}x = \frac{4}{5}$
5. $6x - 5 = 7 - 9x$
6. $3x + 2 = 2 - 10x$
7. $-4(6x - 5) = 23 - 3(8x + 1)$
8. $\frac{1}{3}x + \frac{3}{4} = \frac{5}{6}x - 1$
9. $1.4x + 1.1 = 8.3 - x$
10. $-3x + 5(6 - x) = 4(1 - 2x)$

II. Solve each equation. Be sure to check solutions. (4 points each)

11. $2\sqrt{3x + 4} + 1 = 15$
12. $12 + \sqrt{2x - 1} = 4$
13. $\sqrt{21} - \sqrt{5x - 4} = 0$
14. $10 - \sqrt{2x} = 5$
15. $\sqrt{6x - 4} = \sqrt{2x + 10}$

III. Solve for y. (5 points each)

16. $\frac{y - c}{2} = d$
17. $ay - c = b$
18. $fx + 3y = 2z$
19. $x - 2y = 1$
20. $\frac{2}{3}y + k = j$

IV. Write an equation and solve each problem. (5 points each)

21. Fourteen less than twice some number is 154. Find the number.

22. The length of a rectangle is 9 centimeters more than half the width. Find the length if the perimeter is 60 centimeters.

23. Craig is 24 years younger than his father. In 10 years Craig's father will be three times as old as Craig will be. Find their ages now.