Name:_____ Date:_____

8A; Algebra 1 Period_____

# Homework #41

Solve each Equation:

| | | |
|---|---|---|
| 1) $x^2 - 3x + 2 = 0$ | 2) $m^2 + 10m + 9 = 0$ | 3) $x^2 - 49 = 0$ |
| 4) $3x^2 - 12 = 0$ | 5) $s^2 - s = 0$ | 6) $y^2 - 3y = 28$ |
| 7) $s^2 = -4s$ | 8) $y^2 = 8y + 20$ | 9) $30 + x = x^2$ |

| | | |
|---|---|---|
| 10) $x^2 + 3x - 4 = 50$ | 11) $2x^2 + 7 = 5 - 5x$ | 12) $x(x + 3) = 40$ |
| 13) $\frac{x+4}{-1} = \frac{4}{x}$ | 14) $\frac{2x-2}{x+3} = \frac{x-1}{x-2}$ | 15) $\frac{5+y}{2y} = \frac{y-3}{y}$ |

16) The height *h* of a ball thrown into the air with an initial vertical velocity of 48 feet per second from a height of 5 feet above the ground is given by the equation: $\boldsymbol{h = -16t^2 + 48t + 5}$ where *t* is the time in seconds that the ball has been in the air. After how many seconds is the ball at the height of 37 feet?
Hint: Plug 37 in for h and then solve