21. $(y-4)^2 = 2y$

$-2y$

$(y-4)^2 - 2y = 0$

$(y-4)(y-4)$

$y^2 - 4y - 4y + 16 - 2y = 0$

$y^2 - 10y + 16 = 0$

$(y-8)(y-2) = 0$

$y^2 - 2y - 8y + 16$

$y^2 - 10y + 16$ ✓

$y - 8 = 0$ $\quad$ $y - 2 = 0$

$y = 8$ $\quad$ $y = 2$

$(y-4)^2 = 2y$

$(y-4)^2 - 2y = 0$

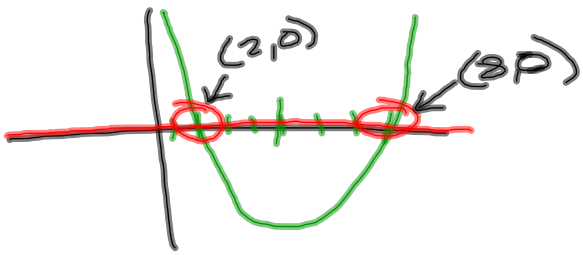
$(x-4)^2 - 2x = y$

Graph on calc.

$y_1 = (x-4)^2 - 2x$

GRAPH

we want points where $y = 0$



$x = 2, 8$

22. $x = (x-6)^2$

$-x$

$0 = -x + (x-6)^2$

$y = -x + (x-6)^2$

2nd Calc: Zero

(4,0) (9,0)

$x=4$ $x=9$

2/1

24. $2(r^2+1)=5r$

$6x^2 - 5x - 1$