

## Funcities

1.  $\sqrt{-2x+12} \leq x-1$  op  $[-1, 6]$

$$\rightarrow x \geq \sqrt{11} \quad \rightarrow \quad 3,32 \leq x \leq 6$$

2.  $f'(x) = \frac{-1}{\sqrt{-2x+12}} \quad \rightarrow \quad f'(0) = -\frac{1}{12}\sqrt{12}$

3.  $\frac{-1}{\sqrt{-2x+12}} = -1 \quad \rightarrow \quad -2x+12 = 1 \quad \rightarrow \quad x = 5\frac{1}{2}$

$$f(5\frac{1}{2}) = 1 \quad \rightarrow \quad (5\frac{1}{2}; 1)$$

4.  $\sqrt{-2a+12} - (a-1) = 2 \quad \rightarrow \quad a^2 + 4a - 11 = 0$

$$\rightarrow a = -2 + \frac{1}{2}\sqrt{60} = 1,87$$

Of met de GR:

$$y_1 = \sqrt{-2x+12} - (x-1) \quad y_2 = 2$$

$$\text{Intersect } x = 1.87 \quad \rightarrow \quad a = 1,87$$

5.  $g(4) = 3 \rightarrow \sqrt{-2 \cdot 4 + b} = 3 \rightarrow b = 17$

$$\rightarrow h(x) = \sqrt{-2x+17}$$