

Wortelfuncties

$$18. \quad \frac{df}{dx} = \frac{2}{2\sqrt{2x-4}} \quad \rightarrow \quad f(x) = 12 = \sqrt{2x-4}$$

$$\rightarrow \quad x = \frac{144+4}{2} = 74$$

$$f'(74) = \frac{1}{\sqrt{2 \cdot 72 - 4}} = \frac{1}{12}$$

$$19. \quad p = 2: \quad f_2(x) = \sqrt{2x-4}$$

$$p = 3: \quad f_3(x) = \sqrt{3x-8}$$

$$f_2(x) = f_3(x) \quad \rightarrow \quad 2x-4 = 3x-8 \quad \rightarrow \quad \begin{aligned} x &= 4 \\ y &= 2 \end{aligned}$$

Dus: G(4,2)

$$\sqrt{px-4p+4} \quad \text{en} \quad x=4 \quad \text{levert}$$

$$\sqrt{4p-4p+4} = \sqrt{4} = 2 \quad \text{dus alle grafieken gaan door G(4,2)}$$