

## Dijkverhoging

$$18. P = \left(\frac{1}{4000}\right)^2 = 6,25 \cdot 10^{-8}$$

$$19. P = \left(1 - \frac{1}{4000}\right)^{100} = 0,975$$

$$20. \text{binompdf}(100, 1/4000, 2) = 0,0003$$

$$21. P = 10^{3,95 - 1,58 w} = \frac{1}{4000} \qquad 3,95 - 1,58 w = \log\left(\frac{1}{4000}\right)$$

$$w = \frac{\log\left(\frac{1}{4000}\right) - 3,95}{-1,58} = 4,78 \text{ m}$$

De dijken moeten dus minimaal 478 cm boven NAP zijn

$$22. P = 10^{3,95 - 1,58 w} \rightarrow \log P = 3,95 - 1,58 w$$

