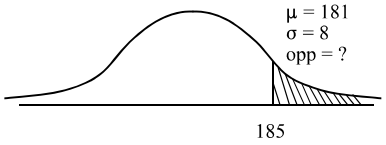
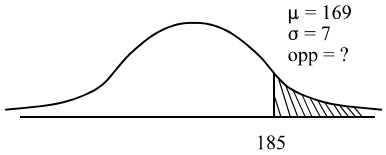
Schooltafels

14.



X = lengte van 17 jarige jongen
P (X > 185) = normalcdf (185 , 10^{99} , 181 , 8) ≈ 0,309
dus 30,9%



Y = lengte van 17 jarig meisje
P (X > 185) = normalcdf (185 , 10^{99} , 169 , 7) ≈ 0,011
dus 1,1%

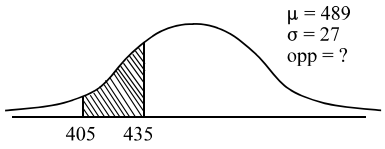
1,1 · 30 = 33% ≠ 30,9% dus de bewering is niet juist.

15. Vaasmodel met 94 knikkers:

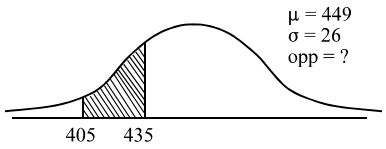
22 rode lange en 72 witte niet-lange

$$P(\text{5 van de 14 zijn lang}) = \frac{\binom{22}{5}\cdot\binom{72}{9}}{\binom{94}{14}} \approx 0{,}129$$

16.



X = knieholtehoogte jongens
P (405 < X < 435) = normalcdf (405 , 435 , 489 , 27) ≈ 0,022
dus 2,2%



X = knieholtehoogte meisjes
P (405 < X < 435) = normalcdf (405 , 435 , 449 , 26) ≈ 0,25
dus 25%

Aantal groene tafels: 60 · 0,022 + 60 · 0,25 ≈ 16

17. Exponentieel: → $b \cdot g^t$

$$g = \frac{29\,479}{25\,597} \approx 1{,}15 \quad \text{dus} \quad 39\,051 \cdot 1{,}15^t$$

in 2010: $39\,051 \cdot 1{,}15^5 \approx 78\,546$ euro.