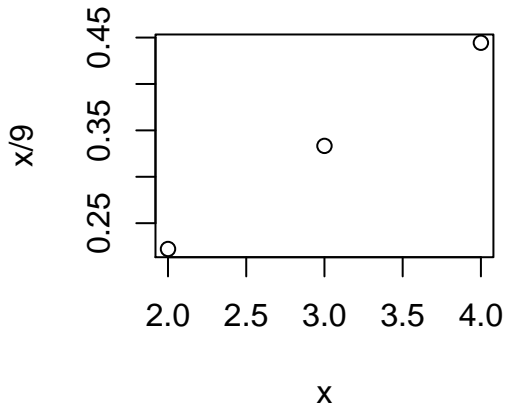


1. `curve(x/9, from=2, to=4, n=3, type='p')`



3 (a) $1 = \sum_x x/c \Rightarrow c = \sum_x x = 10$. $c = 10$

(b) $1 = \sum_x c * x \Rightarrow c^{-1} = \text{sum}_x x = 10 * 11/2$. $c = \frac{1}{55}$

(c) $1 = \sum_x c(1/4)^x \Rightarrow c^{-1} = \sum_x (1/4)^x = \frac{1/4}{1-1/4} = 1/3$. $c = 3$.

(d) $1 = \sum_x c(x+1)^2 \Rightarrow c^{-1} \sum_x (x+1)^2 = 1 + 4 + 9 + 16 = 30$. $c = 1/30$

(e) $1 = \sum_x x/c \Rightarrow c = \sum_x n(n+1)/2$. $c = \frac{n(n+1)}{2}$

(f) $1 = \sum_x \frac{c}{(x+1)(x+2)} = \sum_x c(\frac{1}{x+1} - \frac{1}{x+2}) \Rightarrow c^{-1} = 1$. $c = 1$

8 $P(W = w) = 1/8$ for $w \in \{0, 1, 4, 5, 2, 3, 6, 7\}$.

9 `curve((1 + abs(x - 3))/11, from=1, to=5, n=5, type='s')`

