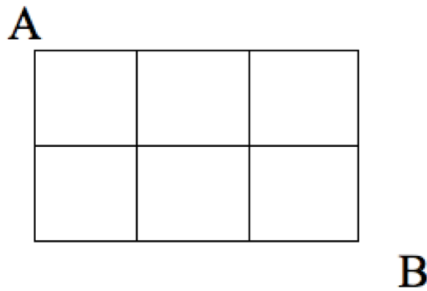


Worksheet §3b

1. Expand out $(x + 1)^7$.
2. Compute $\sum_{i=1}^{100} i$.
3. For $0 \leq k \leq n$, prove that $\binom{n}{k} = \binom{n}{n-k}$ using the formula for binomial symbols.
4. A person at point A in a city walks along streets to get to point B. If they can only walk on lines going down or to the right (in any combination), how many possible paths can they take?



5. Same question, but now for an $m \times n$ city grid.