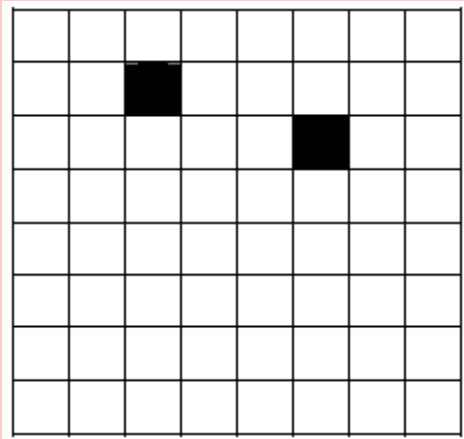
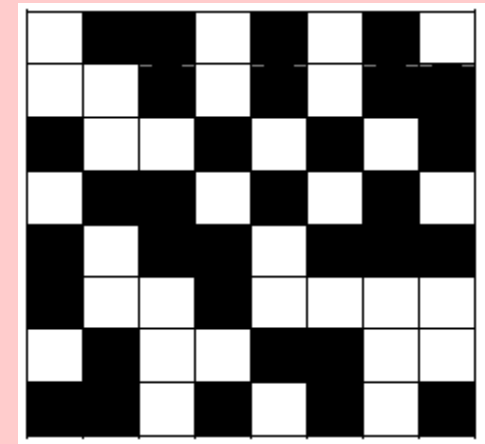
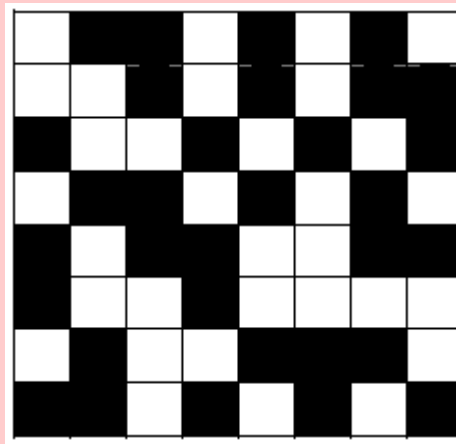
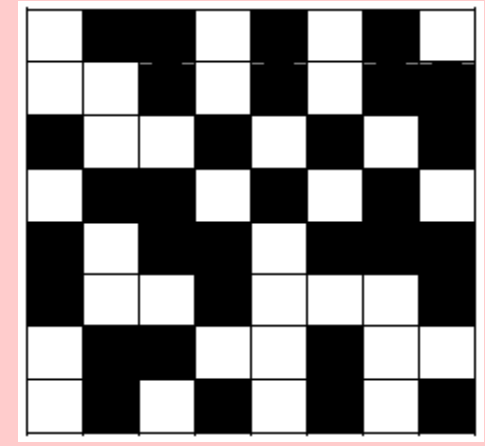
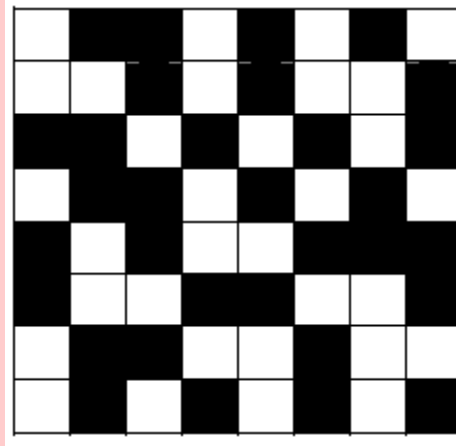


$$W_1 = 64 = 2^6$$



$$W_2 = \frac{64 \cdot 63}{2} = 2^{10.97\dots}$$

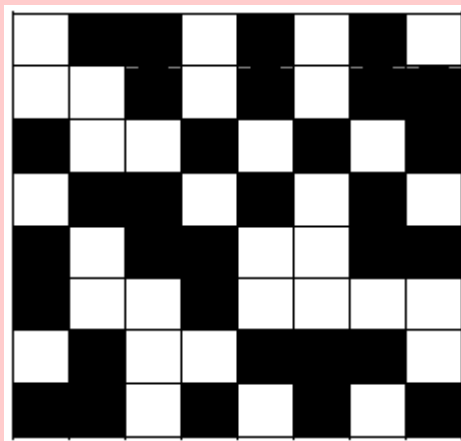
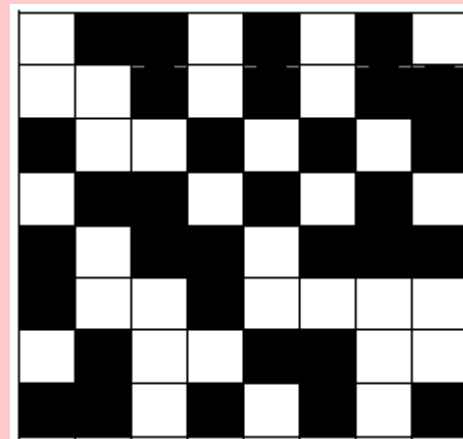
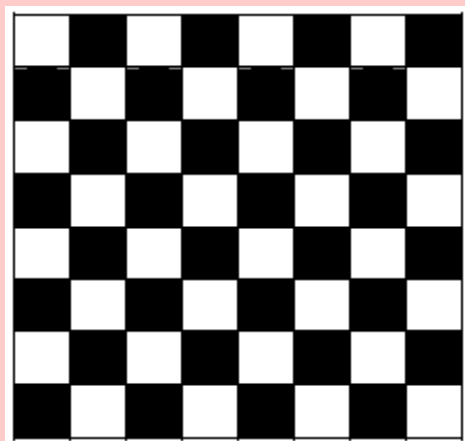
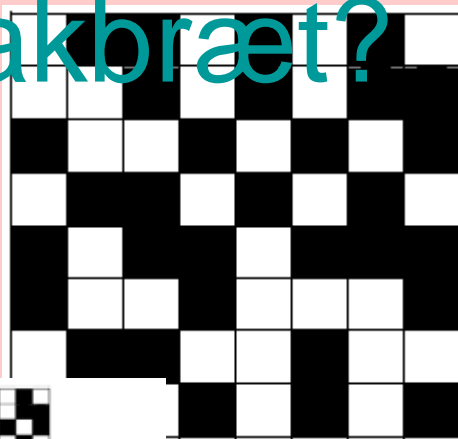
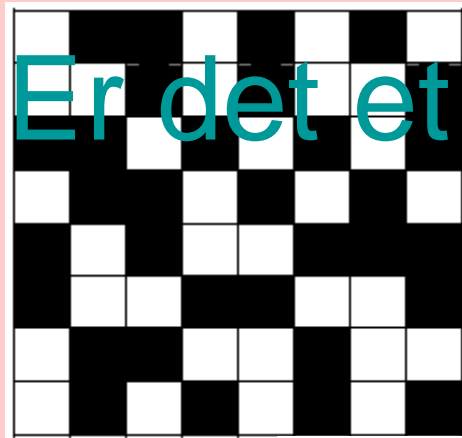


$$W_{32} = \frac{64!}{32!(64-32)!} = 2^{60.6\dots}$$

$$S = k \ln W$$

$$S_{32} = 1.38 \cdot 10^{-23} \text{ J/K} \cdot \ln(2^{60.6\dots}) = 0.000025 \text{ J/K}$$

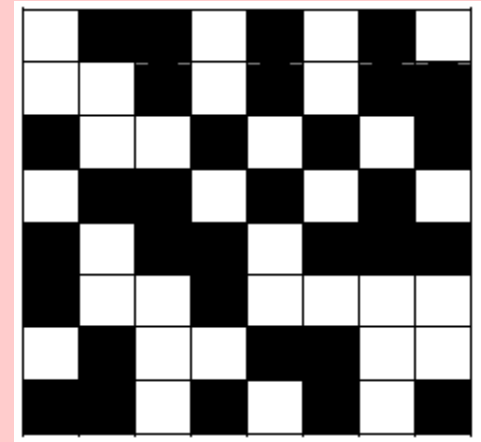
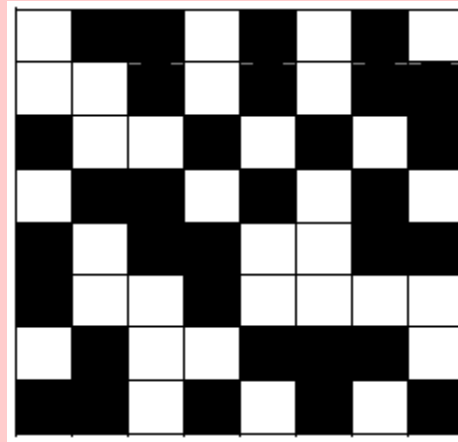
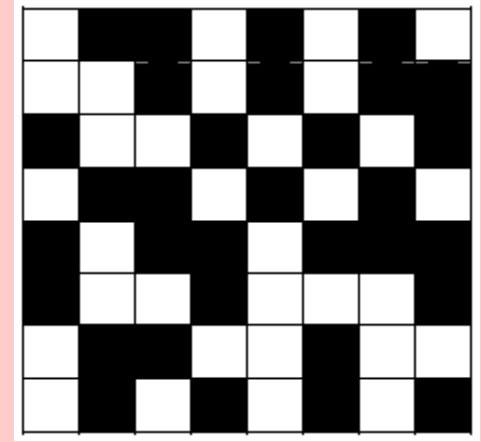
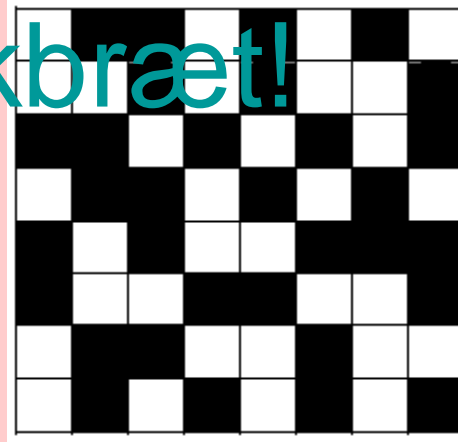
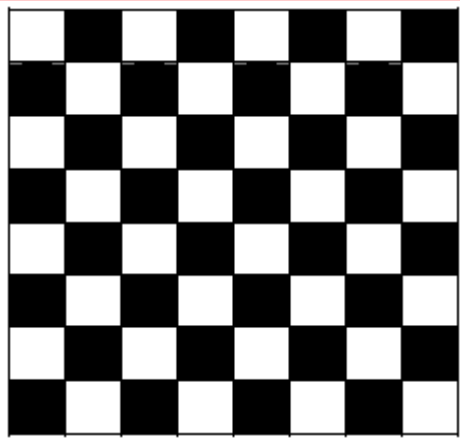
Er det et skakbræt?



Det er et skakbræt!

$$I_{\text{fys}} \equiv -\Delta S / k'$$

$$k' = k \ln 2$$



$$S = k \ln W = k \ln 2^1$$

$$S_{32} = k \ln 2^{60.6\dots} = 60.6\dots \cdot k'$$

$$-\Delta S = S_{32} - S = 60.6k' - 1k'$$

$$I_{\text{fys}} = 60.6\dots - 1 = 59.6\dots \text{bits}$$