10.

$$\left.\begin{aligned} A &= 100\ cm^2 \\ \rho &= 200 \cdot 10^6 \text{ bosses}/cm^2 \end{aligned}\right\} \text{On a donc } \underset{\text{le disque}}{4 \cdot 10^{10}} \text{ bosses sur}$$

$$Q = \log_2 4 = 2 \text{ bits / bosse.}$$

$$\Rightarrow Q_T = 4 \cdot 10^{10} \cdot 2 = 8 \cdot 10^{10} \text{ bits}$$

$$= 10^{10} \text{ octets}$$

$$= 10^{10} \text{ bytes}$$

$$= 9{,}31 \text{ GB} \quad (\text{base } 2)$$