(b) From the table inside the front cover, the atomic radius for molybdenum is 0.136 nm. Therefore, the planar density for the (100) plane is

\[ PD_{100}(\text{Mo}) = \frac{3}{16 R^2} = \frac{3}{16 (0.136 \text{ nm})^2} = 10.14 \text{ nm}^{-2} = 1.014 \times 10^{19} \text{ m}^{-2} \]

While for the (110) plane

\[ PD_{110}(\text{Mo}) = \frac{3}{8 R^2 \sqrt{2}} = \frac{3}{8 (0.136 \text{ nm})^2 \sqrt{2}} = 14.34 \text{ nm}^{-2} = 1.434 \times 10^{19} \text{ m}^{-2} \]