Sendo m > 0, a expressão

$$\left(m^{\frac{1}{2}} + m^{-\frac{1}{2}}\right)^2 + \left(1 + \frac{1}{\sqrt{m}}\right)\left(1 - \frac{1}{\sqrt{m}}\right)$$

é igual a ?

$$\left(m^{\frac{1}{2}} + m^{-\frac{1}{2}}\right)^2 + \left(1 + \frac{1}{\sqrt{m}}\right)\left(1 - \frac{1}{\sqrt{m}}\right) =$$

$$\left(m^{\frac{1}{2}}\right)^2 + 2\left(m^{\frac{1}{2}}\right)\left(m^{-\frac{1}{2}}\right) + \left(m^{-\frac{1}{2}}\right)^2 + 1^2 - \frac{1}{\sqrt{m}} + \frac{1}{\sqrt{m}} - \left(\frac{1}{\sqrt{m}}\right)^2 =$$

$$m^{\frac{2}{2}} + 2m^{\frac{1-1}{2}} + m^{-\frac{2}{2}} + 1 - \frac{1^2}{\left(\sqrt{m}\right)^2} =$$

$$m + 2 \cdot 1 + \frac{1}{m} + 1 - \frac{1}{m} =$$

$$\boxed{m + 3}$$