

$$\begin{aligned}
 &\text{weight of } \begin{array}{|c|} \hline \text{blue dot} \\ \hline \text{black dot} \\ \hline \end{array} \\
 &+ \text{weight of } \begin{array}{|c|} \hline \text{blue dot} \\ \hline \text{black dot} \\ \hline \end{array} \\
 &= \frac{a_2}{c_1} \cdot a_1 + \frac{b_2}{c_1} \cdot b_1 = c_2.
 \end{aligned}$$