

In Weighted Model Counting (WMC) each literal is assigned a weight. The weight of an assignment $w(\alpha)$ is the product of all weights w of its literals. The *weighted model count* of a formula is the sum of the weights of all satisfying assignments of the formula.

Example 2.2. We assign each literal from Example [2.1](#) a weight. $w(v_1) = 1 - w(\neg v_1) = 0.8$, $w(v_2) = 1 - w(\neg v_2) = 0.2$, $w(v_3) = 1 - w(\neg v_3) = 0.1$, $w(v_4) = 1 - w(\neg v_4) = 0.7$, $w(v_5) = 1 - w(\neg v_5) = 0.4$, $w(v_6) = 1 - w(\neg v_6) = 0.5$. Then the resulting weighted model count of the formula is 0.13218.