



Figure 1: An example for propagating the sign of v_1 to v_3 . During the propagation, all other parents of v_3 (here only v_2) are also taken into account. Both v_1 and v_2 are assigned the sign '+' and therefore v_3 receives the two messages '+' \otimes '+' = '+' and '+' \otimes '-' = '-', which are then combined using the sign addition operator to obtain '+' \oplus '-' = '?' as a new sign for v_3 .