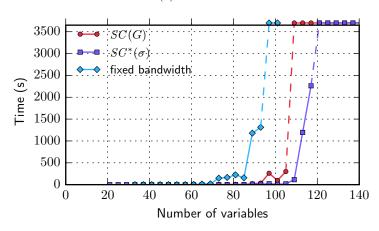
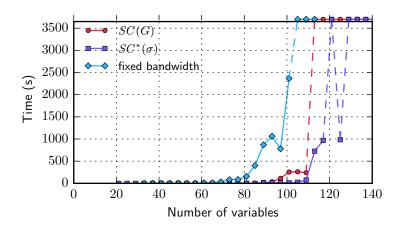


## (a) Non-shuffled formulas.

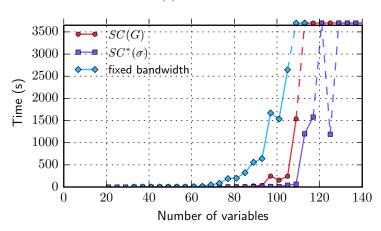


(b) Shuffled formulas.

Figure 1: Subset cardinality formulas on glucose-2.2.

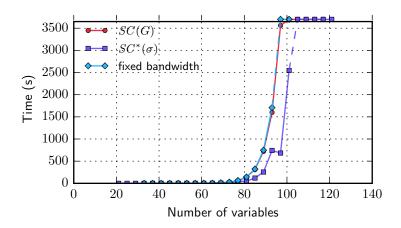


## (a) Non-shuffled formulas.

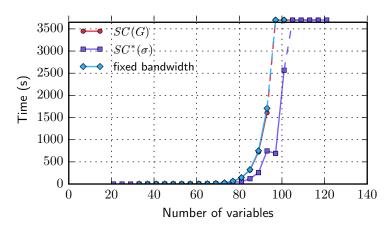


(b) Shuffled formulas.

Figure 2: Subset cardinality formulas on lingeling-ala.



## (a) Non-shuffled formulas.



(b) Shuffled formulas.

Figure 3: Subset cardinality formulas on march-rw.

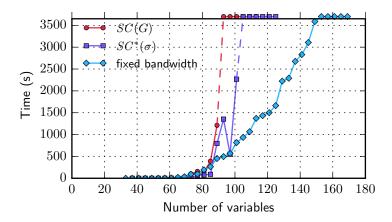


Figure 4: Minisat with fixed variable ordering.

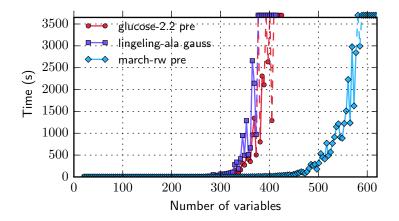
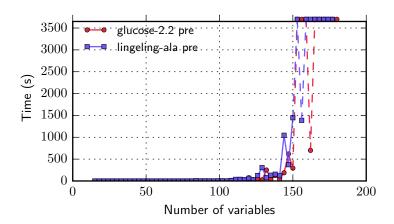
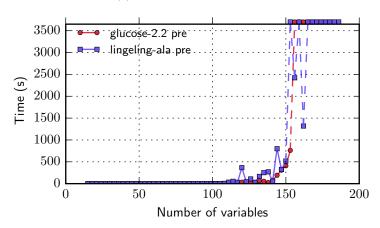


Figure 5: Random 3-CNF formulas.



(a) One vertex charge set to 1, other to 0.



(b) Random assignment of charges to vertices (sum is odd).

Figure 6: Tseitin on random 3-regular graphs.