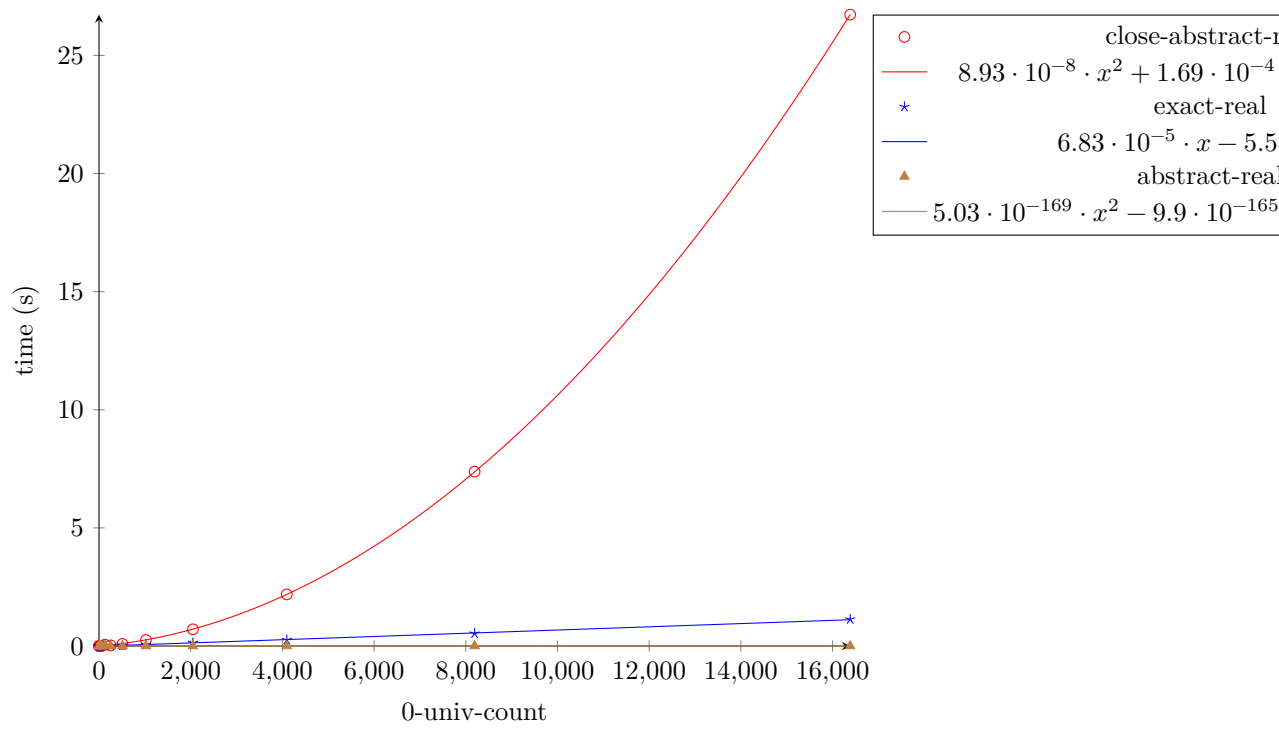Figure 1: timing-pattern

1

Figure 2: timing-n-polymorphic-universes param-1-n   0
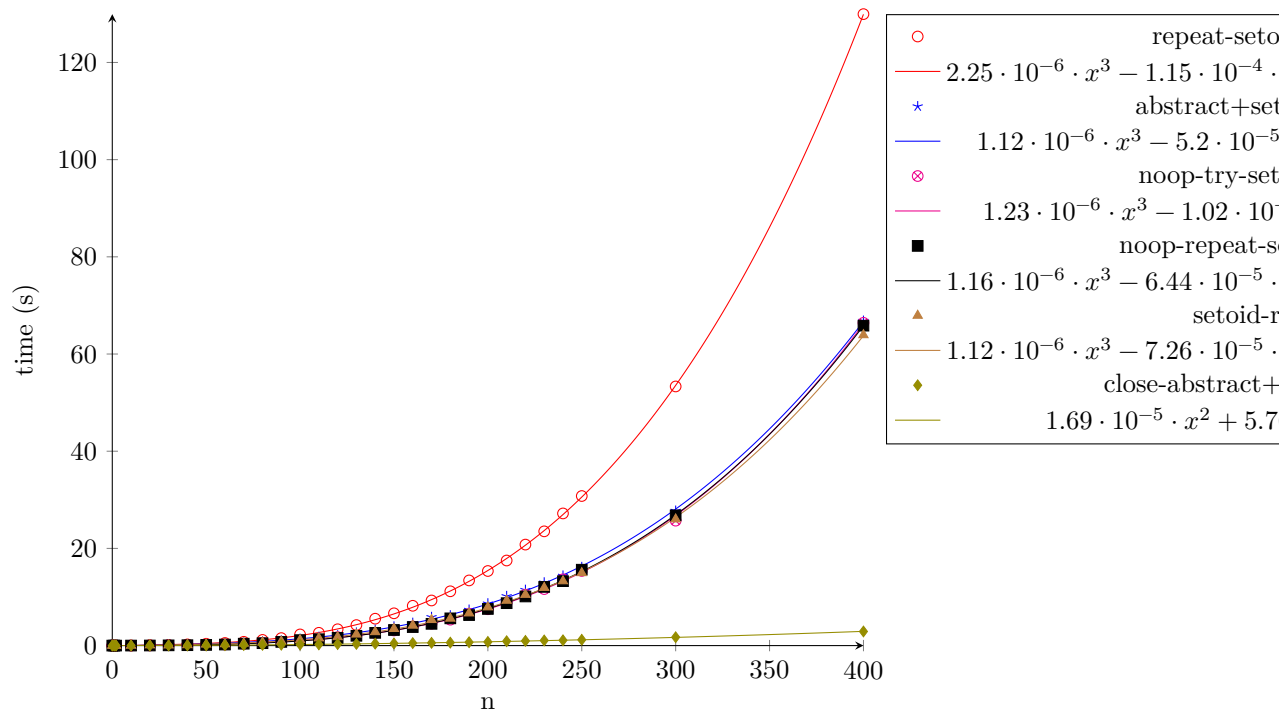
Figure 3: timing-repeat-setoid-rewrite-under-binders
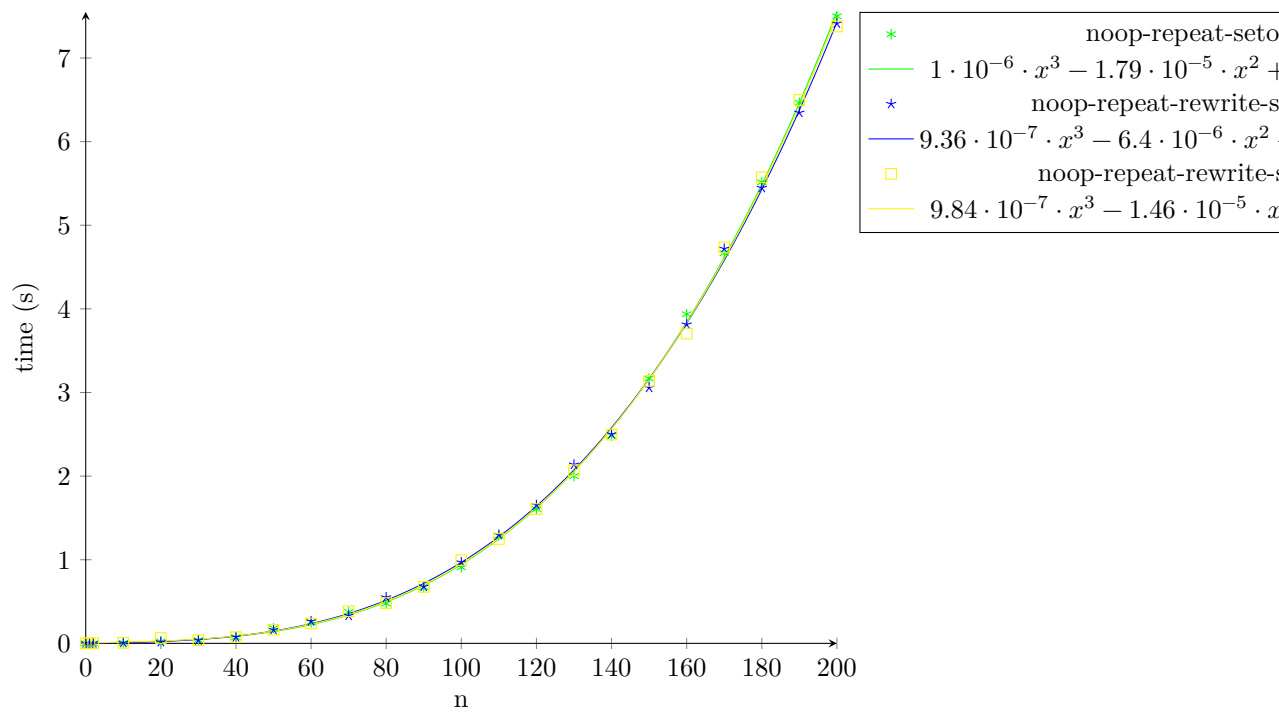
3

Figure 4: timing-repeat-setoid-rewrite-under-binders-noop

4

time (s)

○ abstract+repeat-rew

— $1.33 \cdot 10^{-4} \cdot x^3 - 2.9 \cdot 10^{-3} \cdot$

★ abstract+repeat-rewr

— $1.27 \cdot 10^{-4} \cdot x^3 - 2.55 \cdot 10^{-3} \cdot$

⊗ repeat-rewrite-s

— $1.32 \cdot 10^{-4} \cdot x^3 - 2.92 \cdot 10^{-3} \cdot$

■ repeat-rewrite-s

— $1.27 \cdot 10^{-4} \cdot x^3 - 2.66 \cdot 10^{-3} \cdot$

◇ noop-repeat-rewrit

— $8.09 \cdot 10^{-7} \cdot x^3 + 8.2 \cdot 10^{-6} \cdot$

⬠ noop-repeat-rewrit

— $-4.27 \cdot 10^{-8} \cdot x^3 + 6.92 \cdot 10^{-5}$

– close-abstract+repeat-r

— $1.75 \cdot 10^{-5} \cdot x^2 + 2.49$

● close-abstract+repeat-r

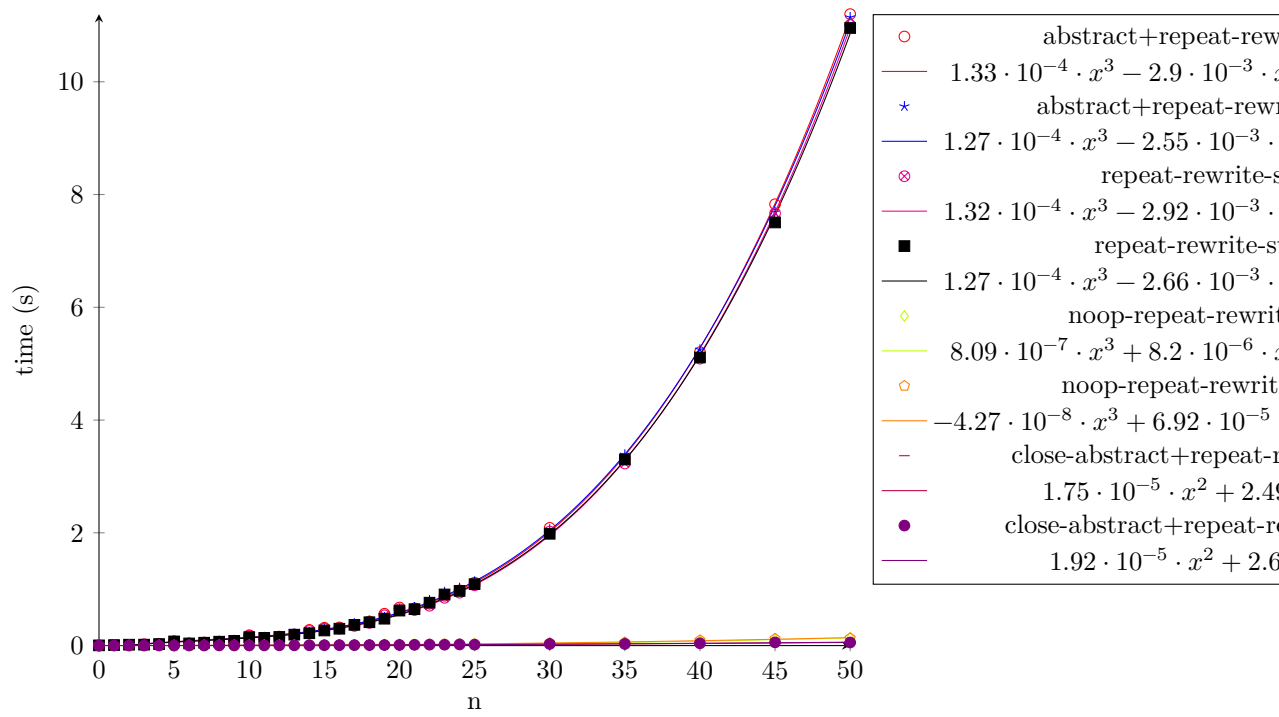— $1.92 \cdot 10^{-5} \cdot x^2 + 2.6$

n
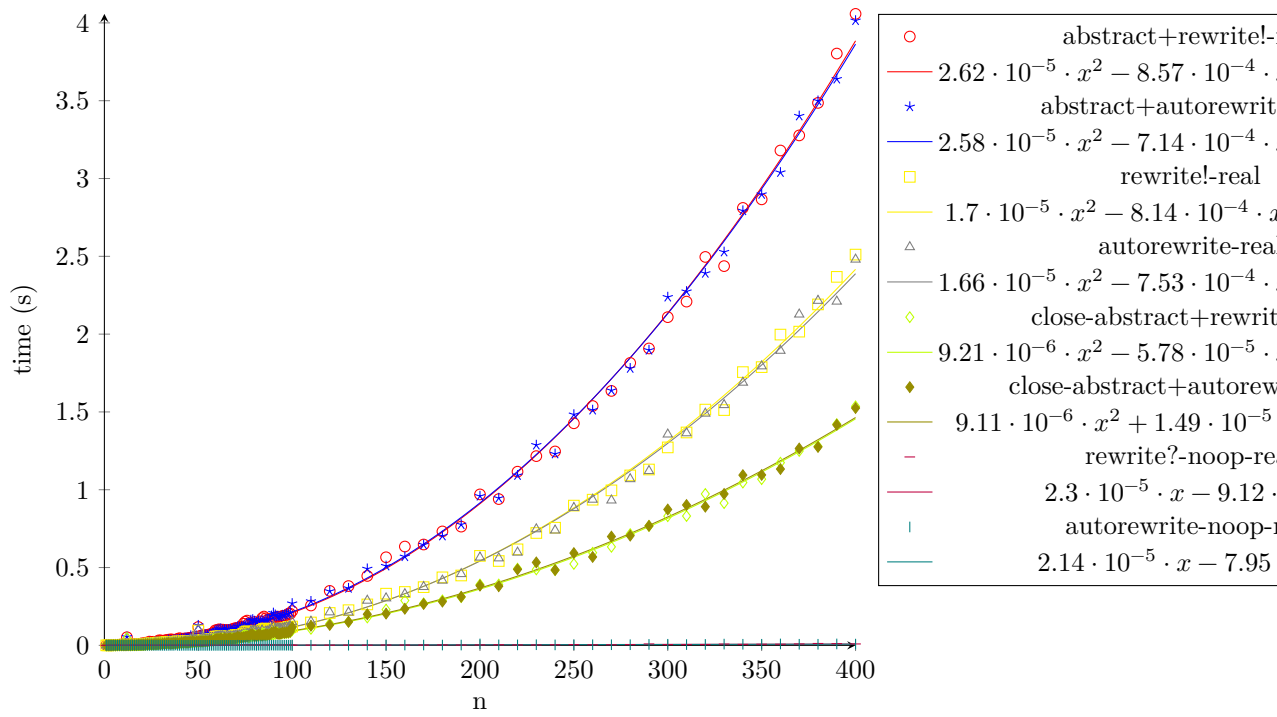
Figure 5: timing-rewrite-strat-under-binders

Figure 6: timing-rewrite-repeated-app-autorewrite
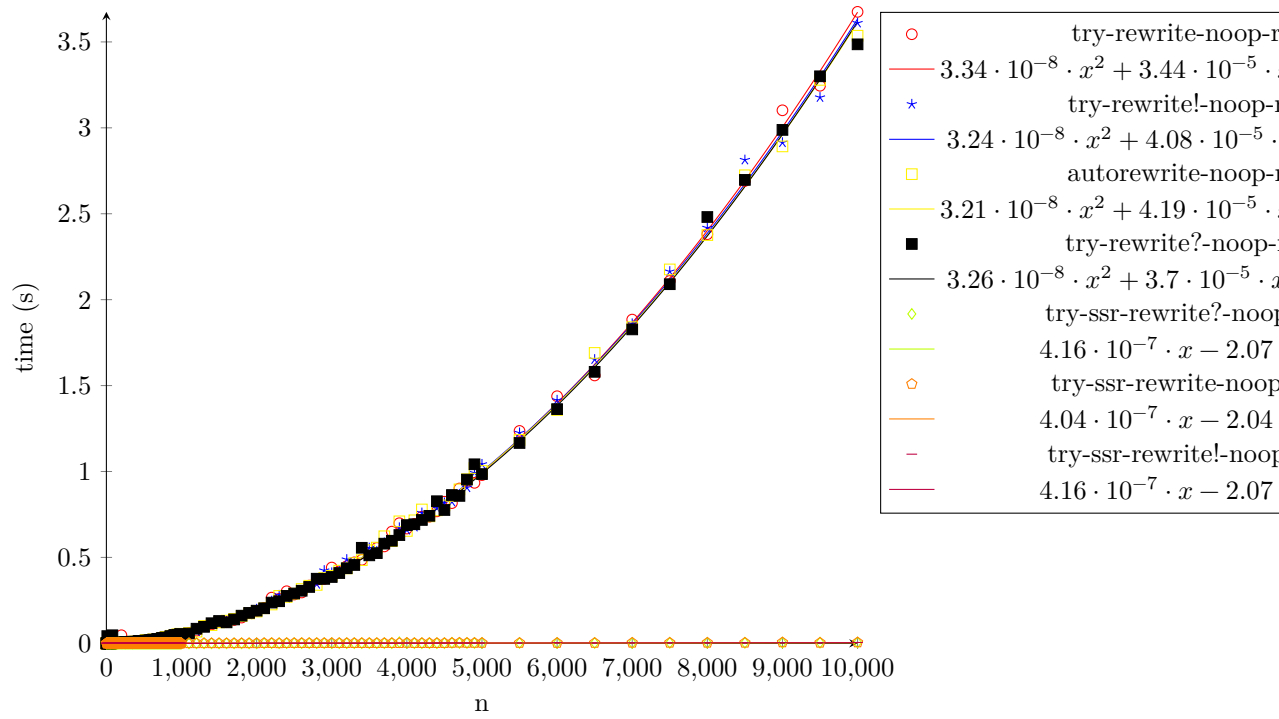
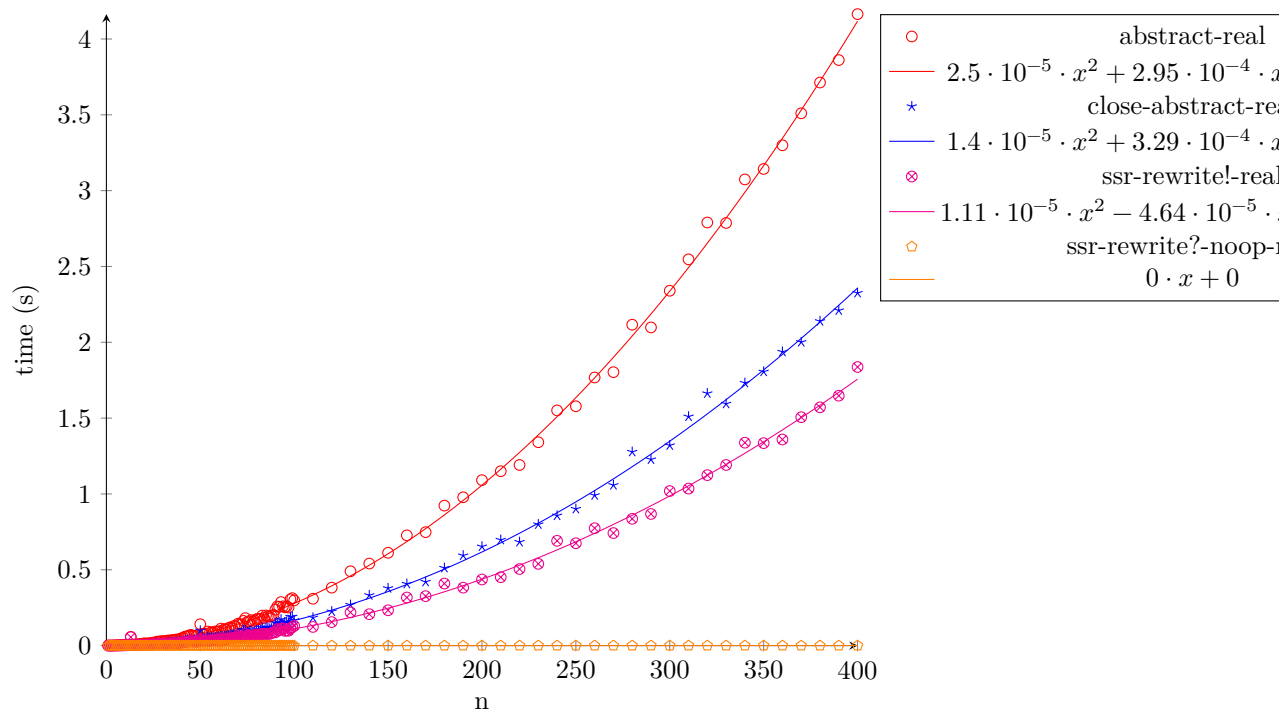Figure 7: timing-rewrite-repeated-app-autorewrite-noop

The plot legend reads:

- ○ try-rewrite-noop-n
- — $3.34 \cdot 10^{-8} \cdot x^2 + 3.44 \cdot 10^{-5} \cdot x$
- ✱ try-rewrite!-noop-n
- — $3.24 \cdot 10^{-8} \cdot x^2 + 4.08 \cdot 10^{-5} \cdot x$
- □ autorewrite-noop-n
- — $3.21 \cdot 10^{-8} \cdot x^2 + 4.19 \cdot 10^{-5} \cdot x$
- ■ try-rewrite?-noop-n
- — $3.26 \cdot 10^{-8} \cdot x^2 + 3.7 \cdot 10^{-5} \cdot x$
- ◇ try-ssr-rewrite?-noop
- — $4.16 \cdot 10^{-7} \cdot x - 2.07$
- ⬠ try-ssr-rewrite-noop
- — $4.04 \cdot 10^{-7} \cdot x - 2.04$
- – try-ssr-rewrite!-noop
- — $4.16 \cdot 10^{-7} \cdot x - 2.07$

Figure 8: timing-rewrite-repeated-app-ssrrewrite
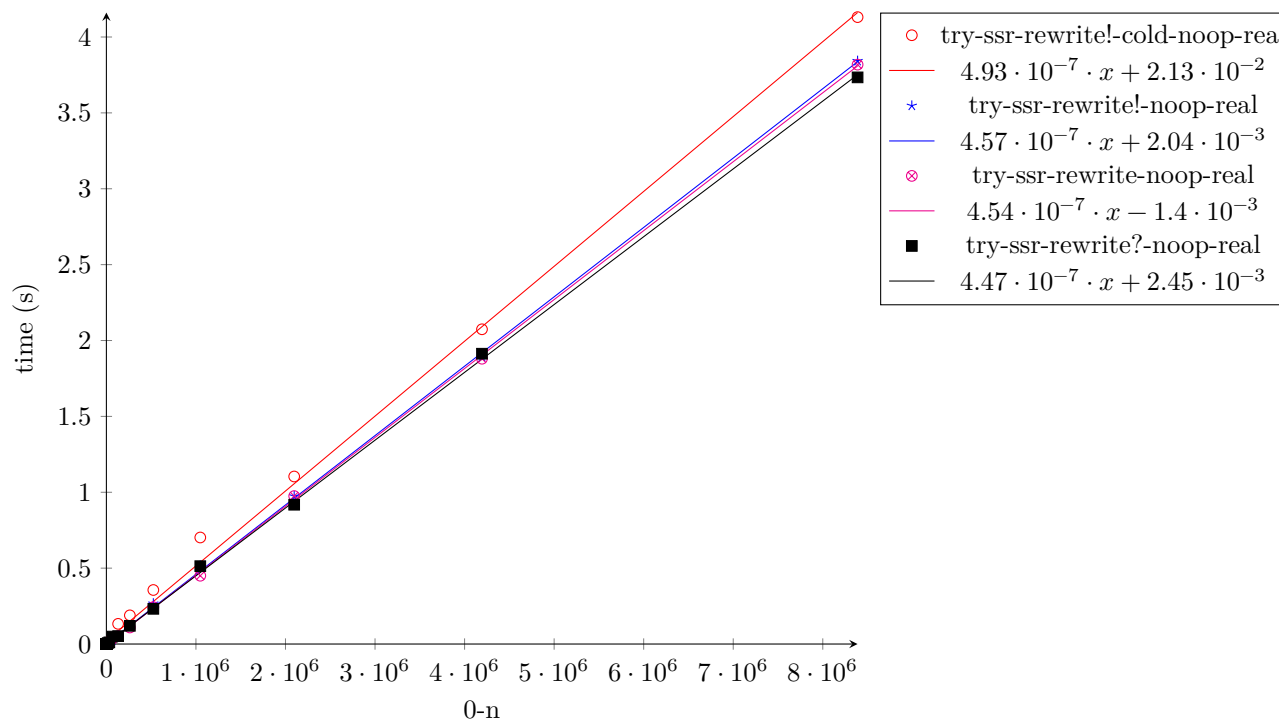
Figure 9: timing-rewrite-repeated-app-ssrrewrite-noop param-1-lgn 1

The plot legend contains:

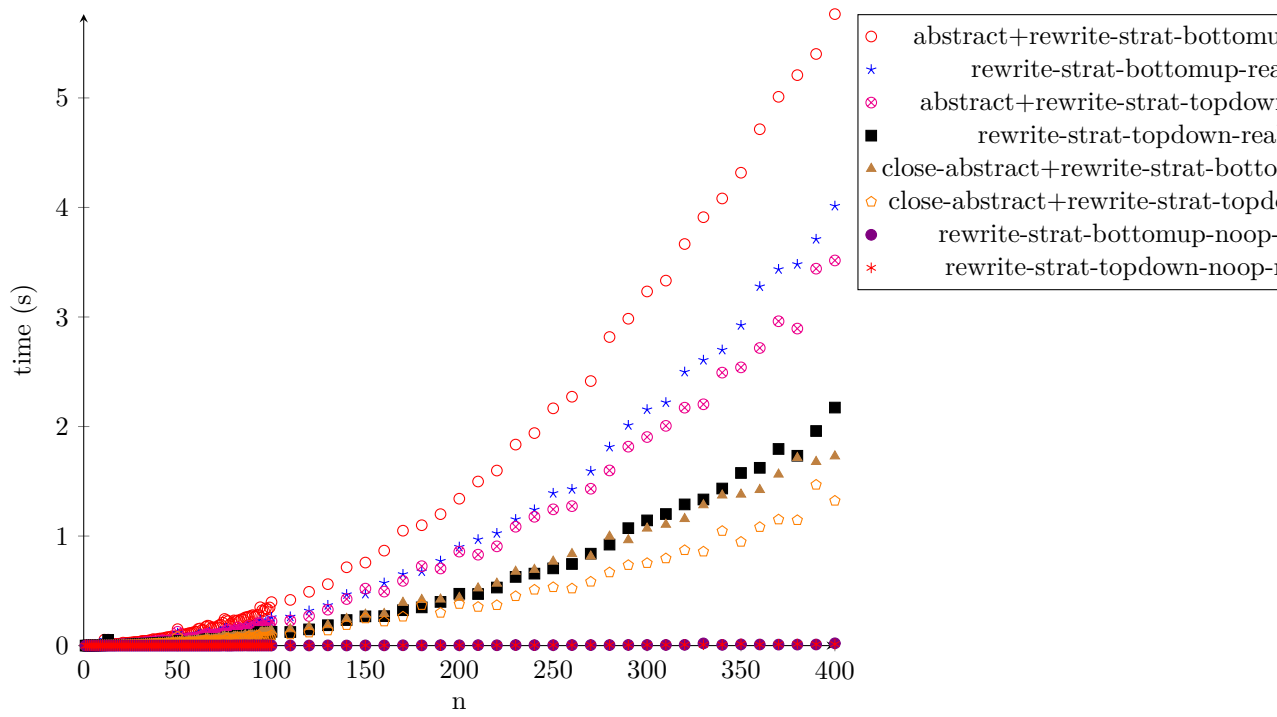- try-ssr-rewrite!-cold-noop-real
- $4.93 \cdot 10^{-7} \cdot x + 2.13 \cdot 10^{-2}$
- try-ssr-rewrite!-noop-real
- $4.57 \cdot 10^{-7} \cdot x + 2.04 \cdot 10^{-3}$
- try-ssr-rewrite-noop-real
- $4.54 \cdot 10^{-7} \cdot x - 1.4 \cdot 10^{-3}$
- try-ssr-rewrite?-noop-real
- $4.47 \cdot 10^{-7} \cdot x + 2.45 \cdot 10^{-3}$

Figure 10: timing-rewrite-repeated-app-rewrite-strat

The legend of the figure contains the following entries:

- abstract+rewrite-strat-bottomu...
- rewrite-strat-bottomup-rea...
- abstract+rewrite-strat-topdow...
- rewrite-strat-topdown-rea...
- close-abstract+rewrite-strat-botto...
- close-abstract+rewrite-strat-topd...
- rewrite-strat-bottomup-noop-...
- rewrite-strat-topdown-noop-...

The axes are labelled "time (s)" (vertical) and "n" (horizontal), with the horizontal axis ranging from 0 to 400 and the vertical axis from 0 to about 5.
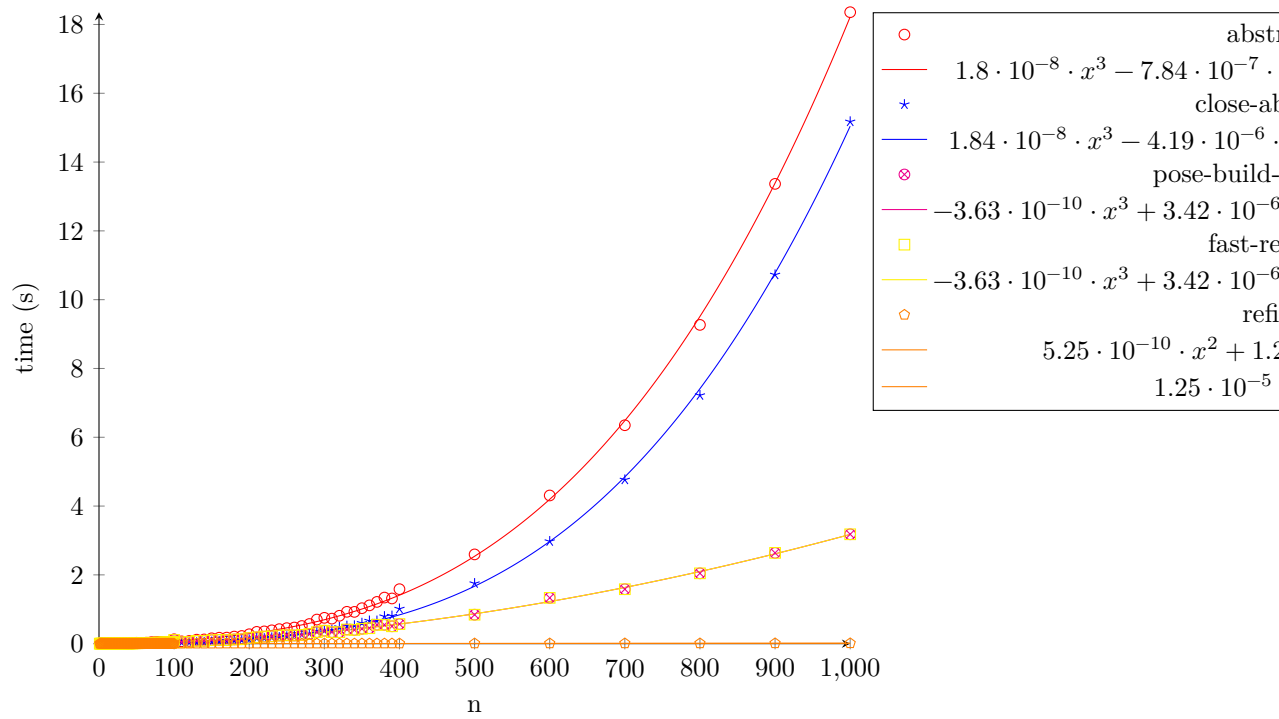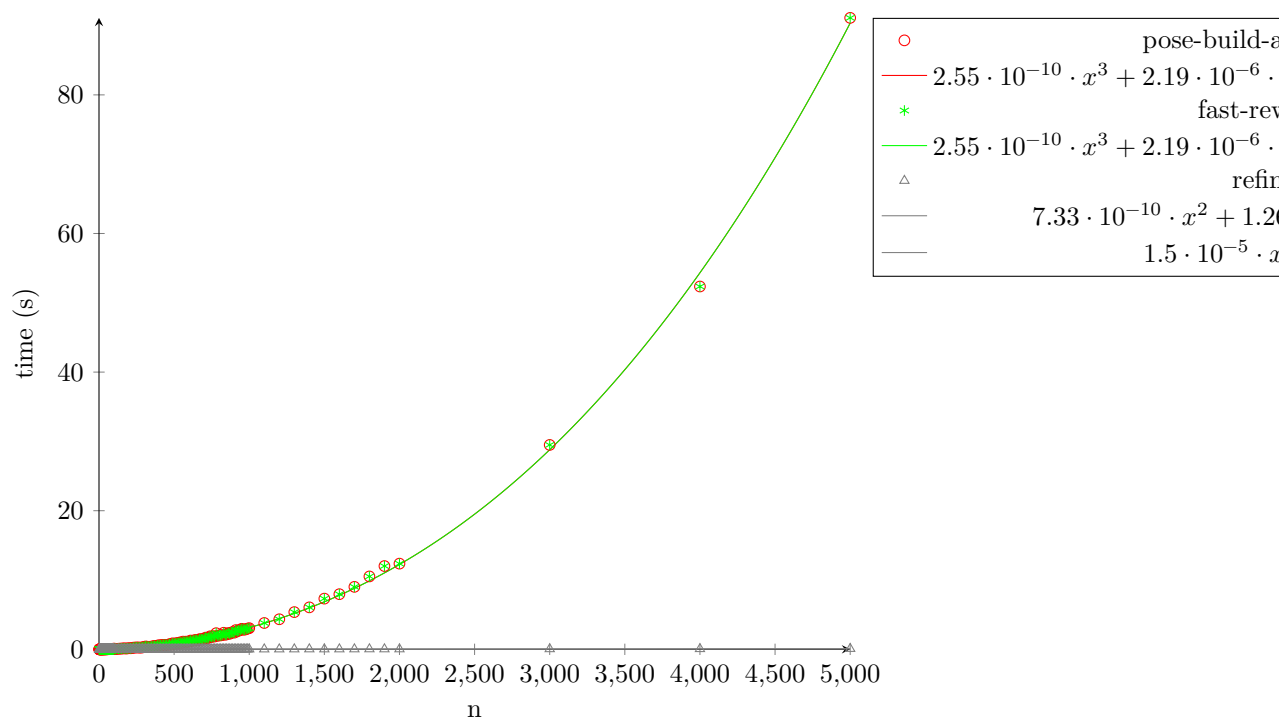
Figure 11: timing-rewrite-repeated-app-fast-rewrite

Figure 12: timing-rewrite-repeated-app-fast-rewrite-no-abstract