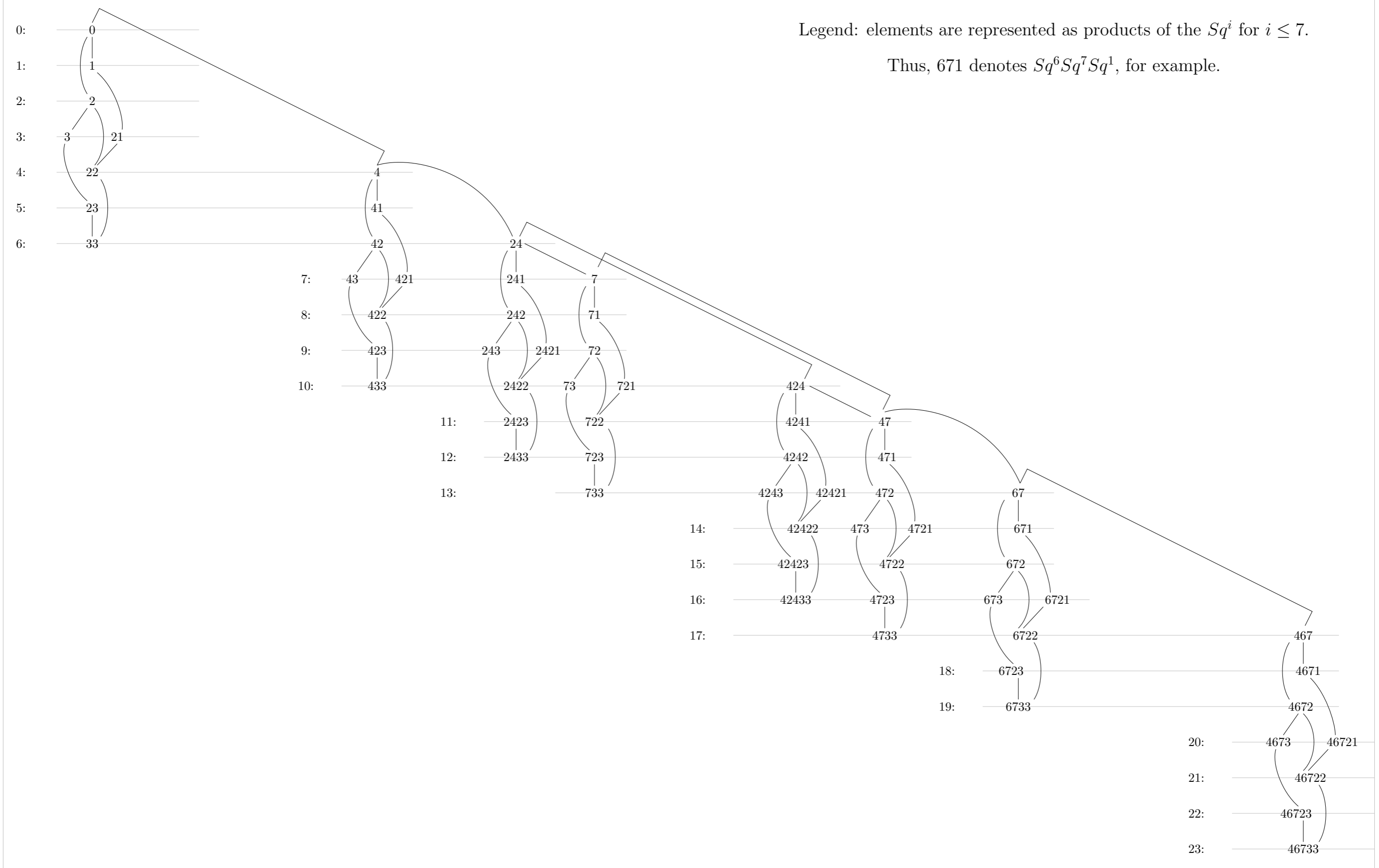


Legend: elements are represented as products of the Sq^i for $i \leq 7$.

Thus, 671 denotes $Sq^6Sq^7Sq^1$, for example.



Recall that the 8 copies of $A(1)$ are cosets $xA(1)$, for the 8 coset representatives x along the top of the diagram. To speed calculations, here are the $Sq^i x$, $i = 1, 2, 4$, expanded in a form that makes it easy to determine $Sq^i xy$ for these x and for any $y \in A(1)$. Note that some are tautologous, e.g. Sq^2 simply translates the Sq^4 coset to the $Sq^2 Sq^4$ coset.

- $14 = 41 + 23$
 - $24 = 24$
 - $44 = 242 + 71$

 - $124 = 7$
 - $224 = 71$
 - $424 = 424$

 - $17 = 0$
 - $27 = 423 + 2421 + 72$
 - $47 = 47$

 - $1424 = 47$
 - $2424 = 723 + 4242 + 471$
 - $4424 = 42422 + 473$
- $147 = 0$
 - $247 = 67$
 - $447 = 4722 + 672$

 - $167 = 42422 + 473 + 671$
 - $267 = 0$
 - $467 = 467$

 - $1467 = 6723 + 4671$
 - $2467 = 6733 + 4672$
 - $4467 = 46722$