```
N = 170 = 2*5*17

By the Ibukiyama-Kitayama dimension formula,
 dim(S_4(K(170))) = 70

By the Skoruppa-Zagier dimension formula and Jacobi restriction,
 the lift dimension of S_4(K(170))^+ is 28
 the nonlift dimension of S_4(K(170))^+ is heuristically 31
 dim(S_4(K(170))^+) thus is heuristically 59
 dim(S_4(K(170))^-) is heuristically 11

The heuristic dimensions are correct by the spanning results to follow

dim(J_{2,170}^{cusp}) = 3 (Skoruppa-Zagier), so need to span to within 2 dimensions

q = 7 for TraceDown
After TD(Grit(J_{4,1190}^{cusp})) and (Grit(J_{2,170}^{cusp}))^2,
 spanned rank in S_4(K(170))^+ is 59
 spanned rank in S_4(K(170))^- is 0

Hecke operators applied: {{{2, 2}}, {{2, 2}, {2, 1}}, {{2, 2}, {3, 1}}}
After Hecke spreading,
 spanned rank in S_4(K(170))^- is 9

After Borcherds products,
 spanned rank in S_4(K(170))^- is 11

Final spanned rank in S_4(K(170))^+ is 59
Final spanned rank in S_4(K(170))^- is 11

--------------------------------------------------------------------------------

S_2(K(170)) is determined by Jacobi restriction and the H4Ndd(2,+) test
 (H_4(170,2,2)^+ = 0)

So S_2(K(170)) = Grit(J_{2,170}^{cusp}) (dimension 3)
```