

```

Invariants[a_List, t_List] := Invariants[a, t] =
  Block[{l = a, r = t},
    Do[If[(i = i /@ l) ≠ {},
      r = Select[{l, i}^T,
        Count[i, #[[2]]] == 1 &] [[;;, 1]] ∪ r;
      l = Complement[l, r]],
      {i, {If[# === Abs /@ #, #, 0] &,
        JonesPolynomial, Colourings[#, 5] &}}];
    {l, r}];

```