

```

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}];

```