

```

CF[g_GD] := Sort[
  g /. Thread[Sort@Cases[g, _Integer, ∞] →
    Range[2 Length[g]]];
PV[F_GD, g_GD] /; Length[F] > Length[g] := 0;
PV[F_GD, g_GD] /; Length[F] < Length[g] := Sum[
  PV[F, y], {y, Subsets[g, {Length[F]}]}];
PV[F_GD, g_GD] /; Length[F] == Length[g] := If[
  CF[F] === CF[g /. Ap | Am → A], (-1)Count[g, Am__], 0];
V2[g_] := V2[g] = PV[GD[A3,1, A2,4], GD[g]];

```