

```

In[1]:= n = 2;
sasiedzi[uu_, vv_] := {{-uu, vv}, {uu, -vv}, {vv, uu}, {-vv, -uu}}
roznica[a_, b_] := Complement[{a}, sasiedzi@@b] == {}

```

```

In[4]:= wierzcholki =
  Flatten[Table[a b, {a, Permutations[Range[n]]}, {b, Tuples[{1, -1}, {n}]}], 1]
krawedzie = Select[
  Subsets[wierzcholki, {2}],
  roznica[#[[1]], #[[2]]] == True &;
waga0[k_] := If[k == 1, {1, 0}, {0, 1}]
waga[k_] := Sign[k] waga0[Abs[k]]
mu[a_] := x waga[a[[1]]] + y (waga[a[[1]]] + waga[a[[2]])]
wierzcholkiw = Table[mu[w], {w, wierzcholki}];
krawedziew = Table[{mu[kr[[1]]], mu[kr[[2]]]}, {kr, krawedzie}];

```

```

Out[4]= {{1, 2}, {1, -2}, {-1, 2}, {-1, -2}, {2, 1}, {2, -1}, {-2, 1}, {-2, -1}}

```

```

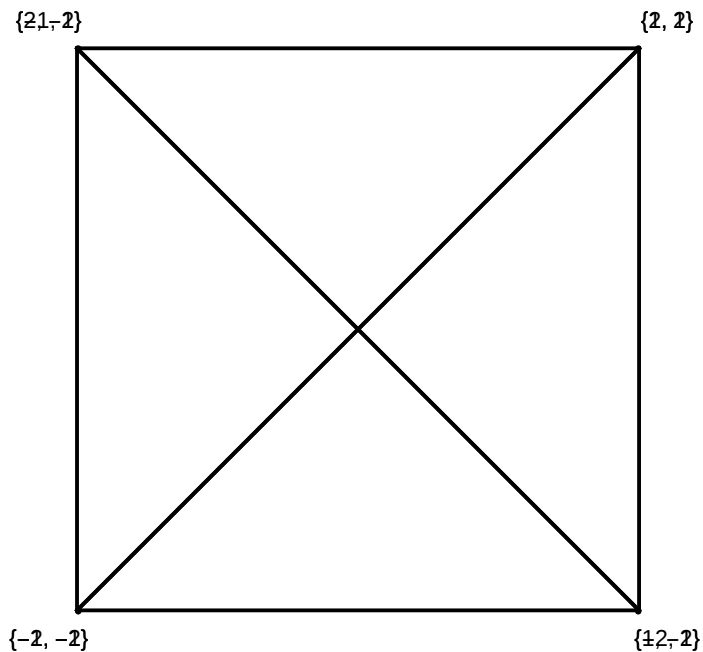
In[15]:= momentpoly[x0_, y0_] := (
  f[a_] := a /. {x -> x0, y -> y0};
  odcinek[a_] := Graphics[{Thick, Line[{f[a][[1]], f[a][[2]]}]}];
  podpis[nr_] := Graphics[
    Text[Style[wierzcholki[[nr]], Medium, Black], 1.1 f[wierzcholkiw[[nr]]]];
  Show[Union[Table[odcinek[a], {a, krawedziew}],
    Table[podpis[nr], {nr, 1, Length[wierzcholki]}]]])
Do[Print["Polaryzacja", {k, 6 - k}];
  Print[momentpoly[k, 6 - k]];
  Print[" "], {k, 0, 6}]

```

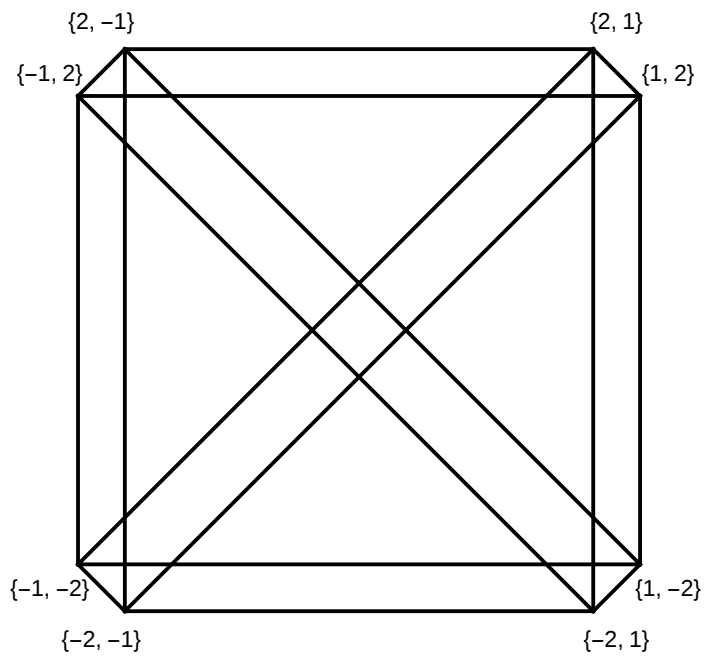
```

Polaryzacja{0, 6}

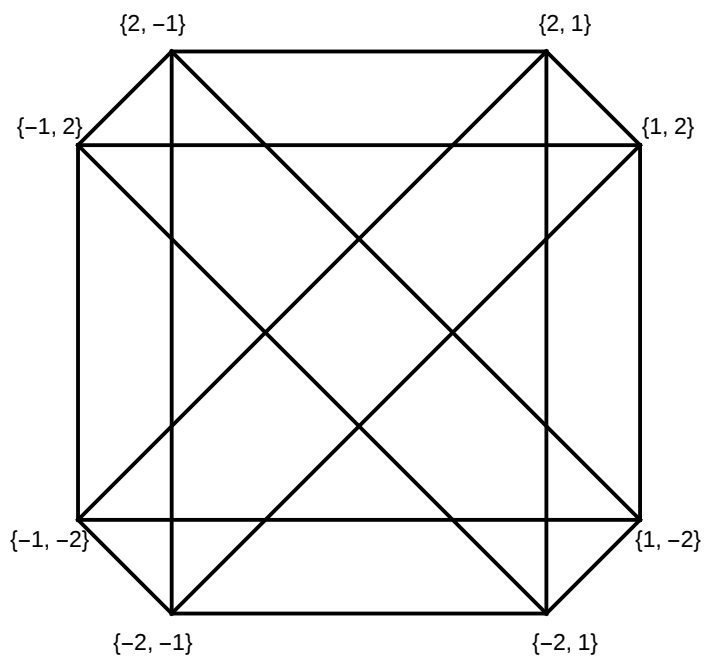
```



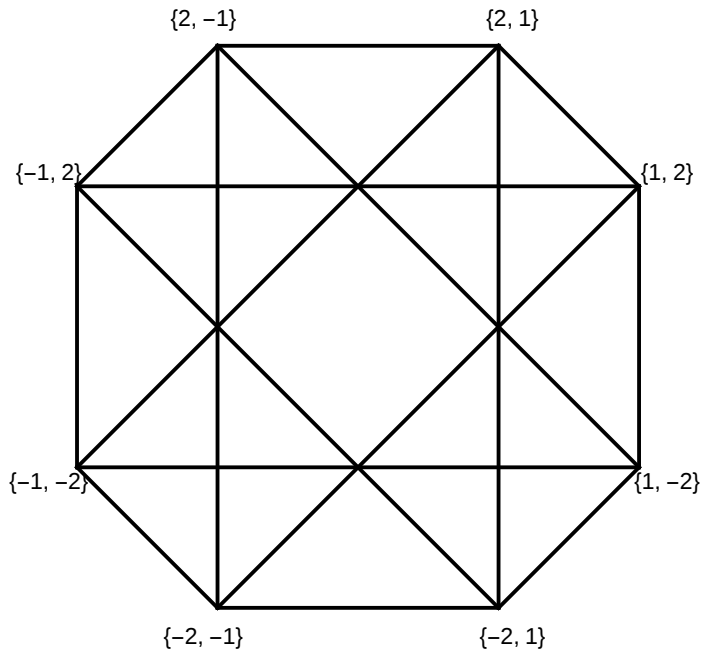
Polaryzacja{1, 5}



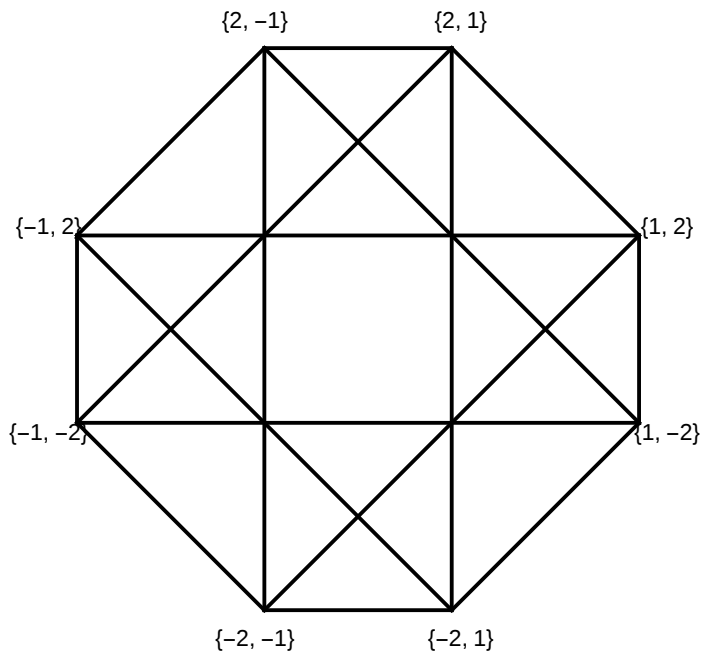
Polaryzacja{2, 4}



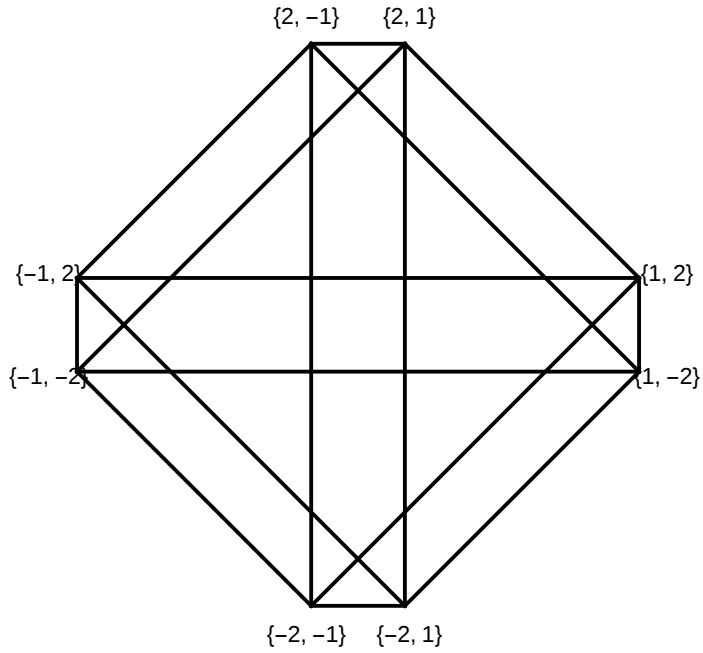
Polaryzacja{3, 3}



Polaryzacja{4, 2}



Polaryzacja{5, 1}



Polaryzacja{6, 0}

