```
**************************
Surface and Symmetry Search
Gord, nG, rk =  60 5 0
**************************
The group G is:
Permutation group G acting on a set of cardinality 5
Order = 60 = 2^2 * 3 * 5
    (1, 2, 3, 4, 5)
    (1, 2, 3)
#Aut(G) =  120
#involution reps =  2
involution centralizer sizes =  [ 12, 8 ]

********** Type I Symmetries

Type I, Case 1
#TypeItriples 0
#Zth 12
num algebraically inequivalent actions:  0
SigGenusData =  []
#SymmInvClasses =  1
SymmInvClassReps =  [
    Id(G)
]
O sizes =  [ 10 ]
Type I ConjData =  []

Type I, Case 2
#TypeItriples 152
#Zth 8
num algebraically inequivalent actions:  19
SigGenusData =  [
    <[ 2, 3, 5 ], 0>,
    <[ 5, 2, 3 ], 0>,
    <[ 3, 5, 5 ], 9>,
    <[ 5, 5, 5 ], 13>,
    <[ 5, 2, 5 ], 4>,
    <[ 5, 5, 3 ], 9>,
    <[ 5, 5, 2 ], 4>,
    <[ 2, 5, 5 ], 4>,
    <[ 3, 5, 3 ], 5>,
    <[ 3, 5, 5 ], 9>,
    <[ 5, 3, 3 ], 5>,
    <[ 2, 5, 3 ], 0>,
    <[ 3, 5, 2 ], 0>,
    <[ 3, 2, 5 ], 0>,
    <[ 5, 5, 3 ], 9>,
    <[ 5, 3, 5 ], 9>,
    <[ 3, 3, 5 ], 5>,
```

```
      <[ 5, 3, 2 ], 0>,
      <[ 5, 3, 5 ], 9>
  ]
#SymmInvClasses =  2
SymmInvClassReps =  [
      Id(G),
      (2, 5)(3, 4)
  ]
O sizes =  [ 15, 1 ]
Type I ConjData =  [
      <[ 1, 1, 1 ], [ 2 ]>,
      <[ 1, 1, 1 ], [ 2 ]>,
      <[ 1, 1, 1 ], [ 2 ]>,
      <[ 1, 1, 1 ], [ 2 ]>,
      <[ 1, 1, 1 ], [ 2 ]>,
      <[ 1, 1, 1 ], [ 2 ]>,
      <[ 1, 1, 1 ], [ 2 ]>,
      <[ 1, 1, 1 ], [ 2 ]>,
      <[ 1, 1, 1 ], [ 2 ]>,
      <[ 1, 1, 1 ], [ 2 ]>,
      <[ 1, 1, 1 ], [ 2 ]>,
      <[ 1, 1, 1 ], [ 2 ]>,
      <[ 1, 1, 1 ], [ 2 ]>,
      <[ 1, 1, 1 ], [ 2 ]>,
      <[ 1, 1, 1 ], [ 2 ]>,
      <[ 1, 1, 1 ], [ 2 ]>,
      <[ 1, 1, 1 ], [ 2 ]>,
      <[ 1, 1, 1 ], [ 2 ]>,
      <[ 1, 1, 1 ], [ 2 ]>,
      <[ 1, 1, 1 ], [ 2 ]>
  ]

********** Type II Symmetries

Type II, Case 1
#TypeIItriples 24
#Zth 12
num algebraically inequivalent actions:  2
SigGenusData =  [
      <[ 5, 5, 2 ], 4>,
      <[ 5, 5, 3 ], 9>
  ]
#SymmInvClasses =  1
SymmInvClassReps =  [
      Id(G)
  ]
O sizes =  [ 10 ]
Type II ConjData =  [
      <[ 1 ], []>,
      <[ 1 ], []>
  ]
```

```
Type II, Case 2
#TypeIItriples 24
#Zth 8
num algebraically inequivalent actions:  3
SigGenusData =  [
    <[ 5, 5, 3 ], 9>,
    <[ 5, 5, 5 ], 13>,
    <[ 3, 3, 5 ], 5>
]
#SymmInvClasses =  2
SymmInvClassReps =  [
    Id(G),
    (2, 5)(3, 4)
]
O sizes =  [ 15, 1 ]
Type II ConjData =  [
    <[ 1 ], [ 2 ]>,
    <[ 1 ], [ 2 ]>,
    <[ 1 ], [ 2 ]>
]
```