```
digraph proof {
  # All nodes except Gathered (PO) have edges towards Majority (P1),
  # so for ease of read we do not write them down.
  # Similarly, self loops are always present and thus not represented.
  # Ending cases
  P [label="Gathered"];
                                      \# measure = (0, 0)
  P0 [label="Majority"];
                                      \# measure = (0, n) n > 0
  # Diameter cases
                                  \# measure = (1, n)
  P1 [label="Diameter-clean"]
  P2 [label="Diameter-dirty"]
                                      \# measure = (2, n)
  # Case of triangles
  P3s [label="Scalene-clean"];  # measure = (3, n)
P4s [label="Scalene-dirty"];  # measure = (4, n
  P4s [label="Scalene-dirty"];
                                      \# measure = (4, n)
 P3i [label="Isoceles-clean"];  # measure = (3, n)
P4i [label="Isoceles-dirty"];  # measure = (4, n)
  P3e [label="Equilateral-clean"]; # measure = (3, n)
  P4e [label="Equilateral-dirty"]; # measure = (4, n)
  # Generic cases
  P5 [label="Generic-clean"]; # measure = (5, n)
  P6 [label="Generic-dirty"];
                                      \# measure = (6, n)
 PO \rightarrow P;
  P1 -> P;
  P2 -> P1;
  P3e -> {P2 P};
  P4e -> P3e;
  P4s -> P3s;
  P4i -> P3i;
 P3i -> P;
 P3s -> P;
 P5 -> {P3e P4i P4s};
 P6 -> P5;
}
```