



The grid is a 9x9 grid divided into three 3x3 sub-grids by thick black lines. The numbers and circles are distributed as follows:

- Top-left sub-grid (rows 1-3, columns 1-3):**
 - Row 1: (1,1) 1, (1,2) 3, (1,3) 7
 - Row 2: (2,1) 5
 - Row 3: (3,1) 6
- Top-middle sub-grid (rows 1-3, columns 4-6):**
 - Row 1: (1,4) 2, (1,5) circle, (1,6) circle
 - Row 2: (2,4) 7, (2,5) 6, (2,6) circle
 - Row 3: (3,4) circle
- Top-right sub-grid (rows 1-3, columns 7-9):**
 - Row 1: (1,7) 6, (1,9) circle
 - Row 2: (2,7) 8, (2,9) 4
 - Row 3: (3,7) circle
- Middle-left sub-grid (rows 4-6, columns 1-3):**
 - Row 4: (4,1) circle, (4,2) 8
 - Row 5: (5,1) 1, (5,2) circle
 - Row 6: (6,1) 6, (6,2) 2, (6,3) 8
- Middle-middle sub-grid (rows 4-6, columns 4-6):**
 - Row 4: (4,4) 4, (4,5) circle
 - Row 5: (5,4) circle, (5,5) 9, (5,6) 7
 - Row 6: (6,4) 8, (6,5) circle, (6,6) 6
- Middle-right sub-grid (rows 4-6, columns 7-9):**
 - Row 4: (4,7) 7, (4,9) 5
 - Row 5: (5,7) 4
 - Row 6: (6,7) circle, (6,9) 3
- Bottom-left sub-grid (rows 7-9, columns 1-3):**
 - Row 7: (7,1) circle, (7,2) 1
 - Row 8: (8,1) circle, (8,2) circle
 - Row 9: (9,1) circle, (9,2) circle
- Bottom-middle sub-grid (rows 7-9, columns 4-6):**
 - Row 7: (7,4) circle, (7,5) circle
 - Row 8: (8,4) circle, (8,5) circle
 - Row 9: (9,4) circle, (9,5) circle
- Bottom-right sub-grid (rows 7-9, columns 7-9):**
 - Row 7: (7,7) circle, (7,8) circle, (7,9) circle
 - Row 8: (8,7) circle, (8,8) circle, (8,9) circle
 - Row 9: (9,7) circle, (9,8) circle, (9,9) circle

Connections between circles (indicated by lines):

- Top-left: (1,1) 1 to (1,2) 3 to (1,3) 7 to (2,1) 5 to (3,1) 6 to (3,2) circle to (3,3) circle to (2,3) circle to (2,2) 6 to (1,2) 3.
- Top-middle: (1,4) 2 to (1,5) circle to (1,6) circle to (2,6) circle to (2,5) 6 to (2,4) 7 to (3,4) circle to (3,5) circle to (3,6) circle to (2,6) circle.
- Top-right: (1,7) 6 to (1,8) circle to (1,9) circle to (2,9) 4 to (2,8) circle to (2,7) 8 to (3,7) circle to (3,8) circle to (3,9) circle to (2,9) 4.
- Middle-left: (4,1) circle to (4,2) 8 to (5,2) circle to (5,1) 1 to (6,1) 6 to (6,2) 2 to (6,3) 8 to (5,3) circle to (4,3) circle to (4,2) 8.
- Middle-middle: (4,4) 4 to (4,5) circle to (5,5) 9 to (5,4) circle to (6,4) 8 to (6,5) circle to (6,6) 6 to (5,6) 7 to (4,6) circle to (4,5) circle.
- Middle-right: (4,7) 7 to (4,8) circle to (4,9) 5 to (5,9) circle to (5,8) circle to (5,7) 4 to (6,7) circle to (6,8) circle to (6,9) 3 to (5,9) circle.
- Bottom-left: (7,1) circle to (7,2) 1 to (8,2) circle to (8,1) circle to (9,1) circle to (9,2) circle to (8,2) circle.
- Bottom-middle: (7,4) circle to (7,5) circle to (8,5) circle to (8,4) circle to (9,4) circle to (9,5) circle to (8,5) circle.
- Bottom-right: (7,7) circle to (7,8) circle to (7,9) circle to (8,9) circle to (8,8) circle to (8,7) circle to (9,7) circle to (9,8) circle to (9,9) circle to (8,9) circle.