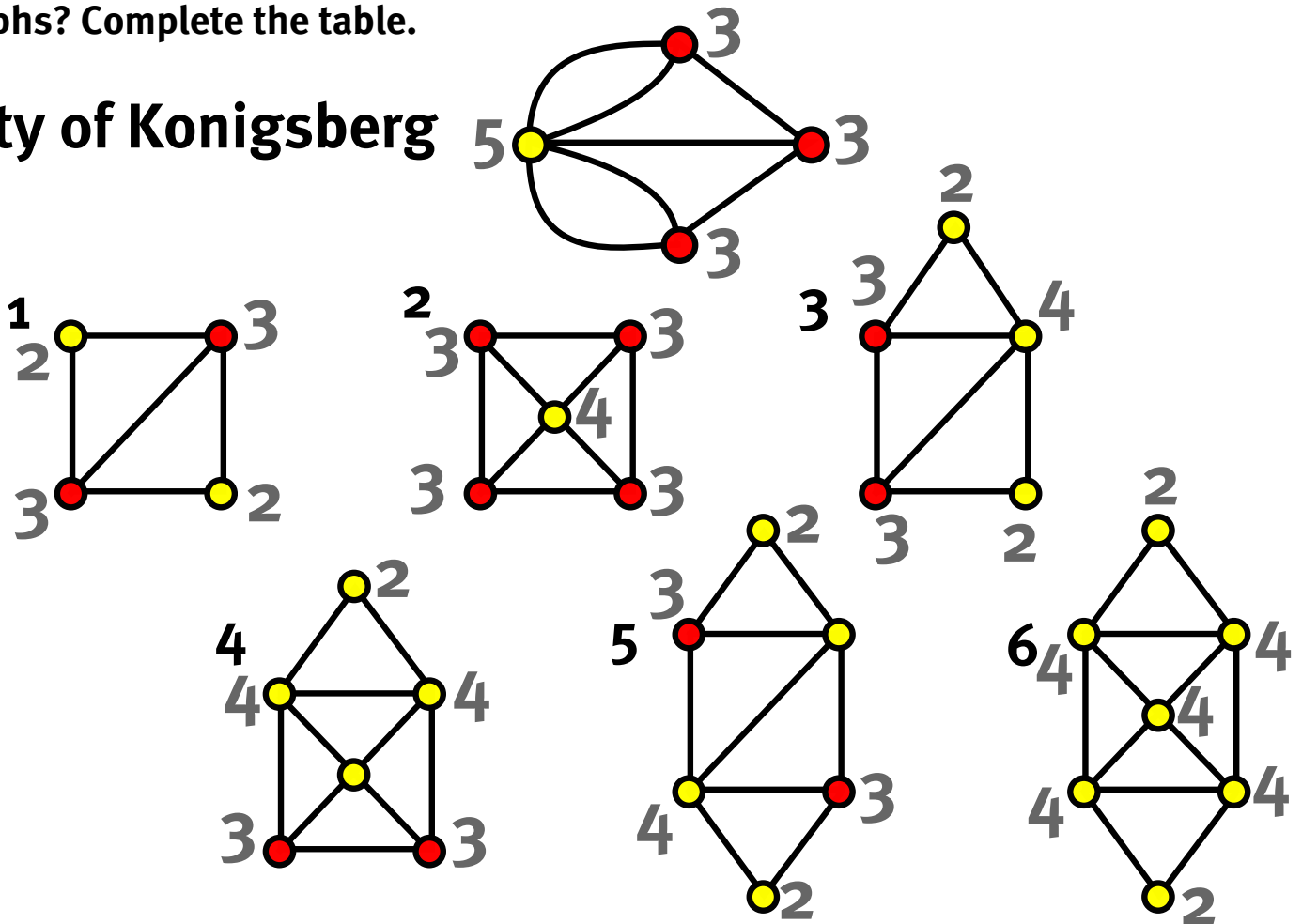


# Odd & Even vertices

Write next to each vertex how many lines meet there, and use two colours to mark if this is odd or even. How many odd and even vertices are there in each of these graphs? Complete the table.

City of Königsberg



| Shape                | City of Königsberg | 1   | 2  | 3   | 4   | 5   | 6   |
|----------------------|--------------------|-----|----|-----|-----|-----|-----|
| Possible?            | No                 | Yes | No | Yes | Yes | Yes | Yes |
| No. of odd vertices  | 4                  | 2   | 4  | 2   | 2   | 2   | 0   |
| No. of even vertices | 0                  | 2   | 1  | 3   | 4   | 4   | 7   |