

i)  $3 \times |V| = 9 \times 2$

$$|V| = 6$$

ii)  $|V| \cdot (|V| - 1) = 28 \times 2$

$$|V| = 8$$

iii)  $2 \times 4 + (|V| - 2) \times 3 = 10 \times 2$

$$|V| = 6$$

iv) Assume  $|V| = a \times b$ .

$ab = 5 = 5 \times 1$  since both 5 and 1 are prime number,  
so  $|V| = 5 + 1 = 6$ .

```
2. public void readMatrix(int[][] matrix) {
```

```
    for (int i = 0; i < matrix.length; i++) {
```

```
        boolean haveIncident = false
```

```
        for (int j = 0; j < matrix[0].length; j++) {
```

```
            haveIncident || matrix[i][j] > 0;
```

```
        }
```

```
        if (!haveIncident) {
```

```
            System.out.println("No incident edge");
```

```
        }
```

$$c \equiv 1 \pmod{12}.$$

3. 1 is an inverse of 1 modulo 12.

5 is an inverse of 5 modulo 12.

7 is an inverse of 7 modulo 12.

11 is an inverse of 11 modulo 12.