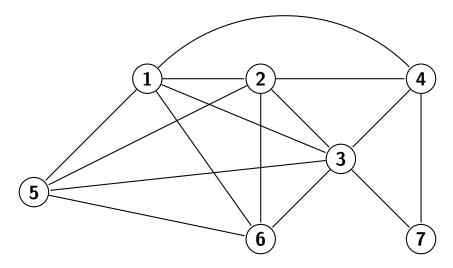
1 Ejercicio 1



De representar graficamente el conjunto de puentes por vertices, nos damos cuenta que, siendo número impar, no existe forma de que se pase por todos los puentes sin repetir al menos uno.

VERTICES =
$$[(1,5),(6,2),(4,3)]$$

2 Ejercicio 2

$$\sum_{i=1}^{n} i = \frac{n(n+1)}{2}$$

$$\operatorname{donde} \sum_{i=1}^{n} i = 1 + 2 + 3 + 4 + \dots + n.$$

$$\sum_{i=1}^{n} i = \frac{n(n+1)}{2}$$

$$\sum_{i=1}^{n} i = 1 + 2 + 3 + 4 + \dots + k.$$

$$\sum_{i=1}^{k} i = \frac{k(k+1)}{2}$$

$$\sum_{i=1}^{k} i = 1 + 2 + 3 + 4 + \dots + k + (k+1).$$

$$\sum_{i=1}^{k} i = \frac{(k+1)(k+2)}{2}$$

$$s(k+1) = s(k) + (k+1)$$

$$\sum_{i=1}^{k} i = \sum_{i=1}^{k} i + (k+1)$$

$$\sum_{i=1}^{k} i = \frac{k(k+1)}{2} + (k+1)$$
$$\sum_{i=1}^{k} i = \frac{k(k+1)+2(k+1)}{2}$$
$$\sum_{i=1}^{k} i = \frac{(k+1)(k+2)}{2}$$

3 Pregunta 3

4 Pregunta 4

$$a \oplus b = b \oplus a$$

 $P(0) = a + b = b + a$
 $a(0) = 0 + b = b, b + 0 = b$
 $P(a) = a + b = b + a$
 $P(s(a)) = s(a) + b = b + s(a)$
 $b + s(a) = s(b + a) = s(a + b)$
 $s(a + b) = s(a) + b$

5 Pregunta 5

$$a \ge b = \begin{cases} s(o) & \text{si } b = o \\ o & \text{si } a = o \\ i \ge j & \text{si } a = s(i) \& b = s(j) \end{cases}$$

$$(n+n \ge n)$$

$$n = s(0)$$

$$s(0) + s(0) \ge s(0)$$

$$s(s(0)) \ge s(0)$$

$$s(s(0)) - s(0) \ge 0$$

$$s(0) \ge 0$$