A) Calculating a region score:

Example alignment of a 6 bp long TFBS from 4 promoters:

- Promoter seq 1: ACGTGG
- Promoter seq 2: ACGTGG
- Promoter seq 3: ACGTGG
- Promoter seq 4: ACGT-

Position: 123456

Number promoters that share conservation: 444433


Percent of each position conserved: 100+100+100+100+75+75

Sum of all (region score): 550

B) Calculating a total score:

**Total score** = (Region score / Pattern length) / 100

= (550 / 6) / 100

= 0.92