

6.2 RAT

Consider the feature structures shown below:

```
fs1 = nltk.FeatStruct("""[A = ?x,  
                           B = [C = ?x]]""")  
fs2 = nltk.FeatStruct("""[B = [D = d]]""")  
fs3 = nltk.FeatStruct("""[B = [C = d]]""")  
fs4 = nltk.FeatStruct("""[A = (1)[B = b],  
                           C -> (1)]""")  
fs5 = nltk.FeatStruct("""[A = (1)[D = ?x],  
                           C = [E -> (1),  
                               F = ?x] ]""")  
fs6 = nltk.FeatStruct("""[A = [D = d]]""")  
fs7 = nltk.FeatStruct("""[A = [D = d],  
                           C = [F = [D = d]]]""")  
fs8 = nltk.FeatStruct("""[A = (1)[D = ?x,  
                           G = ?x],  
                           C = [B = ?x,  
                               E -> (1)] ]""")  
fs9 = nltk.FeatStruct("""[A = [B = b],  
                           C = [E = [G = e]]]""")  
fs10 = nltk.FeatStruct("""[A = (1)[B = b],  
                           C -> (1)]""")
```

Work out on paper what the result is of the following unifications.

(Hint: you might find it useful to draw the graph structures.)

1. fs1 and fs2
2. fs1 and fs3
3. fs4 and fs5
4. fs5 and fs6
5. fs5 and fs7
6. fs8 and fs9
7. fs8 and fs10