1. 1. I1 = { r(a,b), s(b,c), s(a,b) }  
      I2 = { }  
      I3 = { s(b,c), t(b) }
   2. I1 = { }  
      I2 = { n(a,b,c), m(a) }  
      I3 = { m(a) }
2. * 1. r(a,y,a) ^ p(a,y) -> r(y)
     2. r(z,d) ^ q(z,d,c) ^ r(d,d) -> t(c)
     3. q(x,c,e) ^ r(x,x,x) -> p(c,e)
     4. p(y,a) ^ q(b,y) ^ r(y,a,a) -> r(z,a)
   1. 1. p(w,w) ^ m(a,w,b) ^ r(b,b) -> t(a)
      2. r(c,a) ^ p(a,d) ^ s(d,c) -> r(y)
      3. p(b,x) ^ p(b,b) -> p(b,x)
      4. q(a,y) ^ q(y,a) -> r(y,y)
3. None
4. 1. { r(a,b), s(b,c), r(x,y) -> s(x,y), s(x,y) ^ s(y,z) -> s(x,z), s(x,y) -> t(x) | x,y,z ∈ {a,b,c} }
   2. { m(a), n(a,b,c), n(x,y,z) -> m(x), n(x,y,z) -> m(y), m(x) ^ m(y) -> l(x,y) | x,y,z ∈ {a,b,c} }