1.

   a. (α, int, δ, α, β) and (int, δ, char, β, δ).
      - Yes, int = α ; δ = α ; β = α ; char = α
      - common type: (α,α,α,α,α)

   b. (β, (γ, η), (β, α)) and ((α, γ), ζ, (β, α)).
      - Yes, β = (α, γ); ζ= (γ, η)
      - Common type: ((α, γ), (γ, η), ((α, γ), α))

2.

   a. [A ↦ E, D ↦ E → E] is most general as it’s mapping two distinct types to the same type, E without supporting operators
   b. None of the unifiers are most general, the first and third unifiers both map to a function with two types and one variable making them equally general

3.

   a.
      i. [] {X = d(Y, Z), X = d(Z, Y)}
      ii. [Y↦Z] {}

   b.
      i. [] {d(a, b) = d(A, B), f(A) = f(B)}
      ii. [A↦B] {d(a, b) = d(B, B)}
      iii. [A↦B, a↦B] {d(B,b) = d(B, B)}
      iv. [A↦B, a↦B, b↦B] {}

   c.
      i. [] {p(X, Y) = p(X, p(X, Z)), Y = p(A, y), X = p(x, Z)}
      ii. [] {p(p(x,Z),Y) = p(p(x,Z),p(X,Z)), Y=p(A,Y), X=X}
      iii. [X↦A] {p(A, Y) = p(A, p(A, Z)), Y = p(A, Y), A = p(x, Z)}
      iv. ,,,,

   d.
      i. [] {t(A, B, d(a, c)) = t(p(a, E), B, C), p(d(E, c), d(a, F)) = p(d(b, F), C)}
      ii. [A=p(a, E)] {t(p(a, E), B, d(a, c)) = t(p(a, E), B, C), p(d(E, c), d(a, F)) = p(d(b, F), C)}
      iii. [A=p(a, E),C=d(a, c)] {p(d(E, c), d(a, F)) = p(d(b, F), d(a, c))}
      iv. [A=p(a, E),C=d(a, c),F=E] {p(d(E, c), d(a, E)) = p(d(b, E), d(a, c))}
      v. [A=p(a, E),C=d(a, c),F=E,c=E,a=E] {}