```mathematica
R₁[s_, i_, j_] = CF[
    s (1 / 2 - g₃ᵢᵢ + T₂ˢ g₁ᵢᵢ g₂ⱼᵢ - g₁ᵢᵢ g₂ⱼⱼ - (T₂ˢ - 1) g₂ⱼᵢ g₃ᵢᵢ +
        2 g₂ⱼⱼ g₃ᵢᵢ - (1 - T₃ˢ) g₂ⱼᵢ g₃ⱼᵢ - g₂ᵢᵢ g₃ⱼⱼ - T₂ˢ g₂ⱼᵢ g₃ⱼⱼ +
        g₁ᵢᵢ g₃ⱼⱼ +
        ((T₁ˢ - 1) g₁ⱼᵢ (T₂²ˢ g₂ⱼᵢ - T₂ˢ g₂ⱼⱼ + T₂ˢ g₃ⱼⱼ) +
            (T₃ˢ - 1) g₃ⱼᵢ (1 - T₂ˢ g₁ᵢᵢ - (T₁ˢ - 1) (T₂ˢ + 1) g₁ⱼᵢ +
                (T₂ˢ - 2) g₂ⱼⱼ + g₂ᵢⱼ)) / (T₂ˢ - 1))];
```