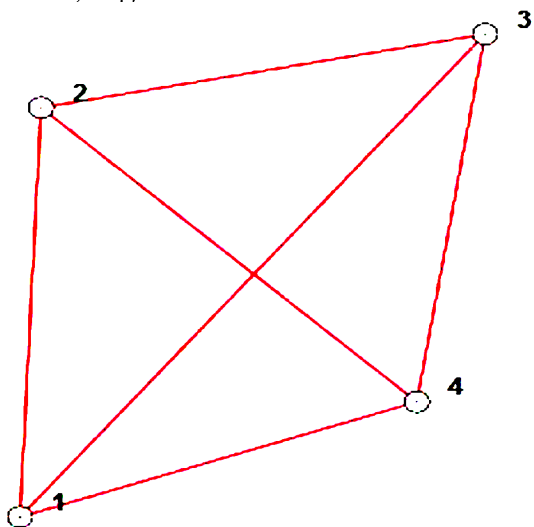


> restart; Digits := 16 :



#1-2.....47.1803

#1-3.....71.5936

#1-4.....40.7192

#2-4.....49.7608

#2-3.....43.9082

#3-4.....42.8732

> s12 := 47.1803 + Δ :

s13 := 71.5936 + Δ :

s14 := 40.7192 + Δ :

s24 := 49.7608 + Δ :

s23 := 43.9082 + Δ :

s34 := 42.8732 + Δ :

> # полупериметры

$$p124 := \frac{(s12 + s24 + s14)}{2} :$$

$$p234 := \frac{(s23 + s34 + s24)}{2} :$$

$$p123 := \frac{(s12 + s23 + s13)}{2} :$$

$$p134 := \frac{(s13 + s34 + s14)}{2} :$$

> # Формула Герона для площади треугольника

$$S124 := \sqrt{p124 \cdot (p124 - s12) \cdot (p124 - s24) \cdot (p124 - s14)} :$$

$$S234 := \sqrt{p234 \cdot (p234 - s23) \cdot (p234 - s34) \cdot (p234 - s24)} :$$

$$S123 := \sqrt{p123 \cdot (p123 - s12) \cdot (p123 - s23) \cdot (p123 - s13)} :$$

$$S134 := \sqrt{p134 \cdot (p134 - s13) \cdot (p134 - s34) \cdot (p134 - s14)} :$$

> F := S124 + S234 - (S123 + S134) : # F = 0

> t := taylor(F, Δ = 0, 3) ;

$$t := -0.8608398403093 - 20.46610779974783 \Delta + 0.3518067843818904 \Delta^2 + O(\Delta^3) \quad (1)$$

$$\begin{aligned} &> fsolve(-0.8608398403093 - 20.46610779974783 \Delta + 0.3518067843818904 \Delta^2 = 0, \Delta) \\ &\quad -0.04203135908869357, 58.21631539316698 \end{aligned} \quad (2)$$

$$\begin{aligned} &> \Delta := -0.042031359; \\ &\quad SI24 + SI234; (SI23 + SI34); \\ &\quad \Delta := -0.042031359 \\ &\quad 1774.715074040070 \\ &\quad 1774.715072732717 \end{aligned} \quad (3)$$

$$\begin{aligned} &> F \\ &\quad 0.0000013073531 \end{aligned} \quad (4)$$