

Protínání vpřed z úhlů

Ze zadaných hodnot vypočtete souřadnice bodu č. 701 (b. 701 je pod spojnicí 5001-5002).

D: 5001 [15 000,00; 75 000,00]

5002 [15 270,15; 75 252,44]

M: $\omega_{5001} = 66,8533$ gon

$\omega_{5002} = 66,0506$ gon

U: 701 [? ; ?]

1. $\sigma_{5001,5002} = 52,1566$ °

$s_{5001,5002} = 369,739$ m

2. $\sigma_{5001,701} = \sigma_{5001,5002} + \omega_{5001} = 119,0099$ °

3. $s_{5001,701} = s_{5001,5002} \frac{\sin \omega_{5002}}{\sin(\omega_{5001} + \omega_{5002})} = 366,238$ m

4. $\Delta y_{5001,701} = s_{5001,701} * \sin \sigma_{5001,701} = +350,03$ m

$\Delta x_{5001,701} = s_{5001,701} * \cos \sigma_{5001,701} = -107,74$ m

5. $Y_{701}^I = Y_{5001} + \Delta y_{5001,701} = 15\ 350,03$ m

$X_{701}^I = X_{5001} + \Delta x_{5001,701} = 74\ 892,26$ m

6. $\sigma_{5002,5001} = \sigma_{5001,5002} \pm 200$ ° = 252,1566 °

7. $\sigma_{5002,701} = \sigma_{5002,5001} - \omega_{5002} = 186,1060$ °

8. $s_{5002,701} = s_{5001,5002} \frac{\sin \omega_{5001}}{\sin(\omega_{5001} + \omega_{5002})} = 368,935$ m

9. $\Delta y_{5002,701} = s_{5002,701} * \sin \sigma_{5002,701} = +79,88$ m

$\Delta x_{5002,701} = s_{5002,701} * \cos \sigma_{5002,701} = -360,18$ m

10. $Y_{701}^{II} = Y_{5002} + \Delta y_{5002,701} = 15\ 350,03$ m

$X_{701}^{II} = X_{5002} + \Delta x_{5002,701} = 74\ 892,26$ m

11. $Y_{701} = (Y_{701}^I + Y_{701}^{II})/2 = \mathbf{15\ 350,03\ m}$

$X_{701} = (X_{701}^I + X_{701}^{II})/2 = \mathbf{74\ 892,26\ m}$