

# SENIOR 2012 - P - Medium

Titolo nota

02/09/2012

$$\frac{x - 666}{334} + \frac{x - 667}{333} = \frac{x - 334}{666} + \frac{x - 333}{667} \quad a \neq 0$$

$$\frac{x - 600}{66} + \frac{x - 633}{33} = \frac{x - 643}{23} + \frac{x - 160}{506} \quad (a = b = 0)$$

$$x \leftarrow 1000$$

$$\text{oppure } x \leftarrow 600$$

$$ax = b$$

$$1 + 2 + \dots + 100$$

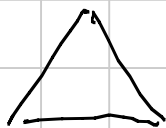
$$\begin{array}{r} 100 + 99 \quad \quad + 1 \\ \hline 101 + 101 \quad \quad + 101 = \frac{100 \cdot 101}{2} \end{array}$$

$$1^2 + 2^2 + \dots + 100^2 =$$
$$100^2 + 99^2 + \dots + 1^2$$

11)  $P_{\text{Lösungen}}$  di GAUSS

1  
2 2  
3 3 3  
⋮ ⋮ ⋮

100 100 ... 100



$$a_n : S_{100} = 10, S_{10} = 100$$

$$S_{110}$$

$$S_n = An^2 + Bn \Rightarrow \frac{S_n - S_m}{n-m} = A(n+m) + B =$$
$$= \frac{A(n+m)^2 + B(n+m)}{n+m}$$
$$= \frac{S_{n+m}}{n+m} \rightarrow \text{ci sialu}$$

$$S_{110} = -110$$