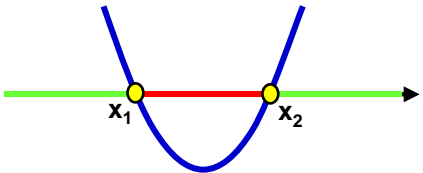
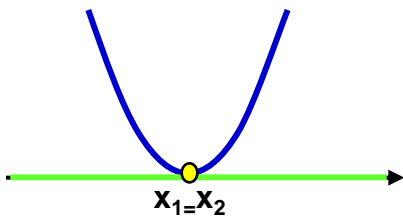
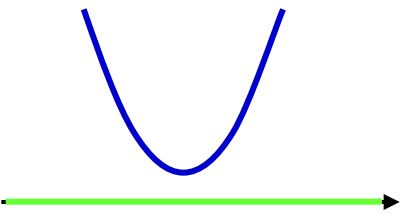


# POLINOMIO DI 2° GRADO

(risoluzione di equazioni e disequazioni)

$$P(x) = ax^2 + bx + c \begin{cases} \geq \\ < \end{cases} 0 \quad \text{se } a < 0 \quad P_1(x) = -ax^2 - bx - c \begin{cases} \leq \\ > \end{cases} 0$$

| $\Delta = b^2 - 4ac$ |   | radici                                      | $P(x) > 0$                       | $P(x) = 0$                  | $P(x) < 0$      |
|----------------------|---|---|----------------------------------|-----------------------------|-----------------|
| $\Delta > 0$         |    | $x_{1,2} = \frac{-b \pm \sqrt{\Delta}}{2a}$ | $x < x_1$<br>e<br>$x > x_2$      | $x = x_1$<br>e<br>$x = x_2$ | $x_1 < x < x_2$ |
| $\Delta = 0$         |   | $x_1 = x_2 = \frac{-b}{2a}$                 | $x \neq x_1 = x_2$               | $x = x_1 = x_2$             | mai             |
| $\Delta < 0$         |  | $x_{1,2} \notin \mathbb{R}$                 | $\forall x_{1,2} \in \mathbb{R}$ | mai                         | mai             |