## Discriminant

$$
\text { In the equation: } a x^{2}+b x+c=0
$$

The discriminant, D , is $b^{2}-4 a c$ that is in the
Quadratic Formula

$$
Q F=\frac{-b \pm \sqrt{D}}{2 a}
$$

If $\mathrm{D} \boldsymbol{>} \mathbf{0}$, there will be two real roots
If $\mathrm{D}=\mathbf{0}$, there will be one double root
If $\mathbf{D}<\mathbf{0}$, there will be two complex conjugate roots

