## Equation of the Chord of the Parabola which is bisected at a given point.

The equation of the chord at the parabola $y^{2}=4 a x$ bisected at the point $\left(x_{1}, y_{1}\right)$ is given by $T=S_{1}$, where $T=y y_{1}-2 a\left(x+x_{1}\right)$ and $S_{1}=y_{1}^{2}-4 a x_{1}$. i.e., $y y_{1}-2 a\left(x+x_{1}\right)=y_{1}^{2}$ -

