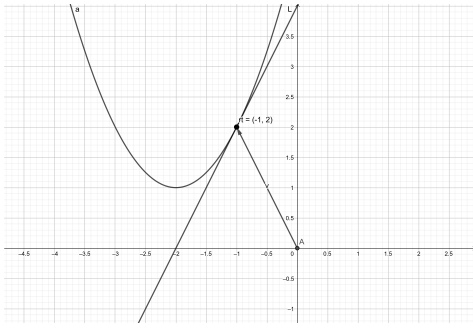


1.  $r(t) = (t - 2, t^2 + 1) \wedge (-2 \leq t \leq 2) \wedge (t = 1)$

■  $r'(t) = (1, 2t)$

■  $t = 1 \Rightarrow r(t) = (-1, 2) \wedge L = \lambda(1, 2) + (-1, 2)$



2.  $r(t) = (\sin(t), 2 \cos(t)) \wedge (0 \leq t \leq 2\pi) \wedge (t = \frac{\pi}{4})$

■  $r'(t) = (\cos(t), -2 \sin(t))$

■  $t = \frac{\pi}{4} \Rightarrow r(t) = (\frac{\sqrt{2}}{2}, \sqrt{2}) \wedge L = \lambda(\frac{\sqrt{2}}{2}, -\sqrt{2}) + (\frac{\sqrt{2}}{2}, \sqrt{2})$

