1999 Abbotsleigh Maths Ext 2 Trial - Q4 (a)

- [i] Show that tangent to the ellipse $\frac{x^2}{12} + \frac{y^2}{4} = 1$ at the point P(3,1) has the equation x + y = 4
- [ii] If this tangent cuts the directrix at the point T and S is the corresponding focus, show that SP and ST are at right angles to each other.