Equation of Tangent and Normal Lines

1. Find the equation of the tangent line of $f(x)=2x^2-12x+5$ passing through the point $(2,-11)$.
2. Find the equation of the tangent line for $f(x)=5x-\sqrt{x} \quad at \quad x=4$.
3. Find the equation of the perpendicular to the tangent line for $f(x)=5x-\sqrt{x} \quad at \quad x=4$.
4. Find the point of tangency between $f(x)=2x^2+6x+5$ and the tangent line $y=-2x-3$.
5. Find the equation of the tangent line of the function $f(x)=x^2-8x$ parallel to $4x-2y=1$.
6. Find the equation of the tangent line of the function $f(x)=-3x^2-8x$ normal to $2x+y=1$.
7. Find k given $f(x)=x^2+x+k$ is tangent to the line $y=3x+4$.
8. Find the points where the graph of $f(x)=x^3+6x^2+5$ will have horizontal tangents.