1. Sketch the parametric curve \( x = \cos t + 2, \ y = \sin t - 3 \).

2. Are the following lines parallel, perpendicular, or neither? If the lines are not parallel, find the intersection point. Sketch the graph of both lines on the same axis, clearly labeling the point of intersection, if applicable.

L1: \( x = -4 + 2t, \ y = 5 + t \)
L2: \( x = 2 + 3u, \ y = 4 - 6u \):
3. Find a vector equation and a set of parametric equations for the line passing thru the points \((1, 3)\) and \((-5, 2)\). What is the \(y\) intercept of this line?

4. Find \(\lim_{x \to 1} \frac{-2x^2}{x - 1}\). If the limit does not exist, support your answer by evaluating the right and left hand limits.
5. Find all vertical asymptotes and holes for $f(x) = \frac{x - 1}{2x^2 + x - 3}$. For each vertical asymptote, find the limit from the left and from the right.