1. A mini license plate for a toy car must consist of a letter followed by two numbers. Each letter must be an S, U or N. Each number must be a 3 or 5. Repetition of digits is permitted.

1. Use the counting principle to determine the number of points in the sample space.
2. Construct a tree diagram to represent this equation.
3. List the sample space.
4. Determine the exact probability of creating a mini license plate with a 3. Give solution exactly in reduced fraction form.

2.  **Evaluate the exponential equation for three values of x greater than -4, three values of x smaller than -4, and at x = -4. Show your work. Use the resulting ordered pairs to plot a graph. State whether the equation of the line is asymptotic to the graph (if any).**

y = 3(x + 4)

3. **Evaluate the logarithmic equation for three values of x that are less than -1, three values of x that are between 0 and -1, and at x = -1. Show your work. Use the resulting ordered pairs to plot a graph. State whether the equation of the line is asymptotic to the graph (if any).**

y = -log3.5 (-x)