Assignment #7-1 Secondary 3 Honors

PreCalculus Book: Pg. 284 3, 9, 12, 15, 57, 58,
69, 71, 74, (No Calculator)
77, 79, 81, 82ab, 90,
95, 98 (No Calculator)

Additional problems:

1. Write the equation of the line that passes through the points (4, 7) and (-3, 2). Write the equation in **point-slope** form.

2. Convert the quadratic into vertex form and draw the graph without a calculator.

   $y = 2x^2 + 8x + 5$

3. Graph the piecewise function without a calculator. $f(x) = \begin{cases} |x+1| & x < 0 \\ -x^2 + 2 & x \geq 0 \end{cases}$

4. Find the inverse function for $g(x) = 3^{x-4} + 2$

5. Simplify without using a calculator.

   a. $\log_5 \frac{1}{25}$ b. $ln(4e^5)$ c. $\ln(x) + \ln(x-2)$