(1) Find the inverse of the function $f(x) = 4\sqrt[3]{2x - 5} + 6$.

(2) Rewrite the functions as logarithmic or exponential functions.
   (a) $2^3 = 8$
   (b) $\ln 3 = 1.099$

(3) Write the $\ln \frac{x^2(y + 3)^3}{z^5 \sqrt{w - 9}}$ as the sum/difference of logs with exponents as factors.

(4) Write $\frac{1}{3} \ln x + 2 \ln y - 4 \ln (z + 1) - 5 \ln (w + 2)$ as a single logarithm.

(5) Find $\log_3 20$

(6) Solve $\log (x - 3) + \log x = 1$ for $x$.

(7) Solve $4e^{3x+2} = 12$ for $x$. 