4.5, #13,22,26,29,31,34,104: Solve the following exponential equations. Give exact answers without using a calculator where possible.
(a). $8^{2x-5} = 32^{x-6}$.

(b). $10^{5+8x} + 4200 = 84000$.

(c). $5e^{4m-3} - 7 = 13$.

(d). $2^{1-6x} = 7^{3x+4}$.

(e). $e^{2x} - 9e^{x} - 22 = 0$.

(f). $e^{2x} = -9e^{x}$.

(g). $x^2 6^x = 6^x$.

4.5, #91,94: Find the inverses of the following functions:
(a). $f(x) = 10^{x-3} + 1$.

(b). $g(x) = \log(x - 11) + 8$.

4.5, #41,55(adjusted),105: Solve the following equations, giving exact answers when possible. If the answers aren't fractions, give approximate solutions to 4 decimal places.
(a). $6\log_5(4p - 3) - 2 = 16$.

(b). $\ln x + \ln(x + 4) = \ln(3x + 6)$.

(c). $\log_3(\log_3 x) = 0$

4.5, #63: A \$2500 bond grows to \$3729.56 in 10 years under continuous compounding. Find the interest rate. Round to the nearest whole percent.

4.5, #65: An \$8000 investment grows to \$9289.50 at 3% interest compounded quarterly. For how long was the money invested? Round to the nearest year.

4.5, #120: Solve the equation $(\log x)^2 = \log(x^3)$.