***** NO CALCULATORS ON THIS ROUND ****

ANSWERS

A)_____

B)_____

C)_____

A)   Find all real solutions for: $\log_2 x + \log_2 (x - 6) = 4$

B)   Solve for x: $8^{\frac{2\log_4 3}{3}} - e^{\ln 5} = x^2 - 7^{(\log_7 3 + \log_7 x)}$

C)   The graph of the exponential function $f(x) = a \, b^x$ passes through the points $(1, \frac{1}{2})$ and $(3, \frac{3}{8})$. Find the exact value of a+b