3 (a) The graphs appear to intersect near the point $(2, 2.5)$. Thus, the solution is $x \approx 2$.

(b) $f(x) = g(x) \Rightarrow 10^{0.2x} = 2.5 \Rightarrow \log 10^{0.2x} = \log 2.5 \Rightarrow 0.2x = \log 2.5 \Rightarrow$

$$x = \frac{\log (2.5)}{0.2} = 5 \log 2.5 \approx 1.990$$