(b) It is given that $\mathrm{g}(x) = \ln(2x^2 + 5)$ for $x \geqslant 0$,

$\mathrm{h}(x) = 3x - 2$ for $x \geqslant 0$.

Solve the equation $\mathrm{hg}(x) = 4$ giving your answer in exact form. [3]

9 Solve the equation $12x^{\frac{2}{3}} - 5x^{-\frac{2}{3}} - 11 = 0$ for $x > 0$. Give your answer correct to one decimal place. [4]