1 Solve the equation $4|7x-3|-5=9$. [3]

2 **DO NOT USE A CALCULATOR IN THIS QUESTION.**

Variables x and y are related by the equation $y=kx^2$. When $x=1+\sqrt{2}$, $y=1-\sqrt{2}$. Find the value of k, giving your answer in the form $a+b\sqrt{c}$, where a, b and c are integers. [4]