4B Using Graphs to Solve Inequalities

1. By using appropriate sketches, solve $\frac{1}{x} > 1$

2.

a) On the same axes sketch the graphs of the curves with equations $y = \frac{7x}{3x+1}$ and $y = 4 - x$.

b) Find their points of intersection.

c) Hence solve $\frac{7x}{3x+1} < 4 - x$