## MAT125, Paper Homework 5

1. For what values of $x$ between 0 and $2 \pi$ is the function

$$
f(x)=x-2 \sin (x)
$$

increasing?
2. How many lines which are tangent to the curve

$$
y=\frac{x}{x+1}
$$

pass through the point $(1,3)$ ? Where do they touch the curve?

