**Question 4**

(a)Find the indeﬁnite integrals of the following functions

(i)

(ii)

 (x >0)

(iii)

(b) Evaluate

(c)

(i). Write down a deﬁnite integral that will give the value of the area under the curve

 between and x = π

(The expression takes no negative values for

You are not asked to evaluate the integral by hand.)

**Provide a printout of your working for part (c)(ii).**