

## MA 623: Tutorial 1

(Note: Justify all the relevant steps.)

1. “Evaluate” the following function, that is, write it in the form of simpler arithmetic function(s):

$$\sum_{\substack{d|n \\ (d,k)=1}} \mu(d).$$

2. Show that  $\sum_{d|n} \mu(d) \log^m d = 0$  if  $m \geq 1$  and  $n$  has more than  $m$  distinct prime factors.