## Math 10460 - Honors Mathematics II Homework 12a - Due Wednesday, April 20

You must show your work in all of the problems!!!

Recall that  $S^2$  is the sphere,  $\mathbb{T}$  is the torus, and  $\mathbb{K}$  is the Klein bottle.

(1) Complete the proof from class that there are only 5 Platonic solids by examining the cases when n=4 and n=5 and filling in the chart

n	c	Platonic Solid
3	3	
3	4	
3	5	
4		
:		
5		
:		