Grading Comments for TAM 202 HW # 1 , Jan 31, 2001

a) Total points — 10 pts   (2.41 (1 pt) , 2.65 (1 pt)
                              2.81 (5 pts) , 2.83 (3 pts))

b) Common Errors :

① 2.65 , the angle between $\vec{r}$ and $\vec{F}$ is <u>not</u> exactly 60°

One should calculate $\vec{r}$ by sum of $\overrightarrow{OB}$ and $\overrightarrow{BA}$ (see solution)
and then use $\vec{M} = \vec{r} \times \vec{F}$ to calculate $\vec{M}$. Do not directly
assume that $\theta = 60°$ and use $M = |\vec{r}||\vec{F}| \sin 60°$

② 2.81 (g) and (h) . Some students do not realize that
the moment of $\vec{F_2}$ about axis DC is not a vector . (It
should be a scalar since the direction of the moment is given
about axis DC).

③ 2.83 (a) the calculation of unit normal vector . One should
know the normal vector he/she calculated is inward or
outward (or say inplane or out of plane)

(c) A clear picture (see solution) will help one to determine the
coordinate of point E.

(c) Things students should notice :

① please show steps as clear as possible . Do not neglect
your algebric symbols connecting steps , i.e. " = " and so on.

② Neater hand-writting is better !

③ Do not forget about vector notation ; in order to distingulish
vectors and scalars.   ④ units are important !