King Fahd University of Petroleum & Minerals CIVIL ENGINEERING DEPARTMENT

CE 201 STATICS (Sections 1 & 2)

Second Semester 1432 / 2011 (102)

Name:_	Key	Solution	_
ID#:		· · ·	

Quiz#5

Score		
	10	

1) Draw the free-body diagram of member AB. 390 lb

RA

800 lb ft

390 lb

Rey

800 lb ft

800 lb ft

390 lb

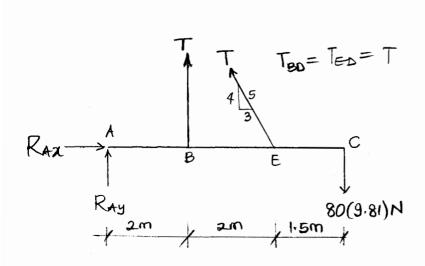
Rey

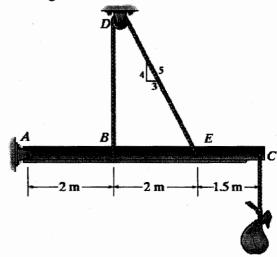
800 lb ft

390 lb

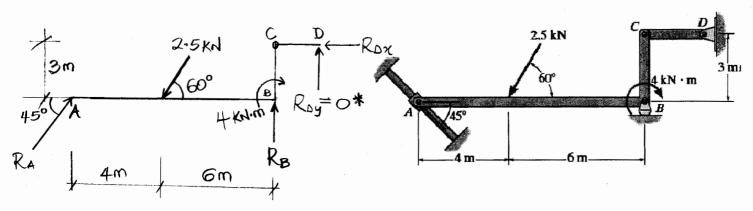
Rey

2) Draw the free-body diagram of the beam AC which supports the 80-kg load.





3) Draw the free-body diagram of member ABC which is supported by a smooth collar at A, roller at B, and short link CD.



* Note that CD is a two-force member, so Roy=0.