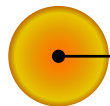
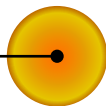


center of mass lies halfway  
between two stars of equal mass



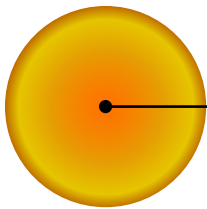
Star 1  
mass  $M$



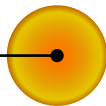
Star 2  
mass  $M$



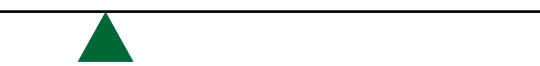
center of mass lies closer  
to the more massive star



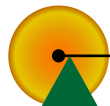
Star 1  
mass  $2M$



Star 2  
mass  $M$



center of mass lies  
inside the star



Star  
mass  $M$



Planet  
mass  $0.01 M$

