Numerical_Three_Body_Problem_2D

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[ ]:
```
def gravity(r,t):
    sx = r[0]
    vsx = r[1]
    sy = r[2]
    vsy = r[3]

    dsxdt = vsx
    dsydt = vsy

    dvsxdt = G * me * (ex-sx) / (((ex-sx)**2 + (ey-sy)**2) ** (3/2)) - G * mm *␣
↪(sx-mx) / (((sx-mx)**2 + (sy-my)**2) ** (3/2))
    dvsydt = G * me * (ey-sy) / (((ex-sx)**2 + (ey-sy)**2) ** (3/2)) - G * mm *␣
↪(sy-my) / (((sx-mx)**2 + (sy-my)**2) ** (3/2))

    #x-position x-velocity y-position y-velocity
    ###################

    drdt = [dsxdt,dvsxdt,dsydt,dvsydt]

    return drdt
```