# Gravitational Force Math Help 

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F_{g}=G \frac{m_{1} m_{2}}{r^{2}}
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What must be the distance between two 0.8 kg blocks if the magnitude of the gravitational force between them is $8.92 \times 10^{-11} \mathrm{~N}$ ?

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$$

Find the magnitude of gravitational force a 70 kg person would experience while standing on the surface of Mars. (mass $=6.42 \times 10^{23}$ kg , Radius $=6.42 \times 10^{6} \mathrm{~m}$ )

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$$

2 masses are separated by 0.5 meters. If the mass of one of them is 0.6 kg and there is a gravitational force of $2.55 \times 10^{-10} \mathrm{~N}$ between them, what is the mass of the second object?

