

## A Question of Astrology

Every object pulls at you – gravitationally. Force results in motion.

Many of you do not realize how much astronomical objects influence your motion (that is your direction in life). Knowledge of and the ability to calculate this influence takes the skill of an astrologer. The astrological practitioner requires advanced scientific reasoning with a rigorous quantitative understanding of physics. Most of you do not have time to develop a deep appreciation for astrology but the following assignment is designed to give you some practice.

You will determine the force exerted on you by various astronomical objects. In every case assume the object is at its closest point to you. Also assume the object is at its mean orbital radius. For example, assume Jupiter is in the night sky so the distance is the difference between the Earth's mean radius and Jupiter's mean radius.

Determine the force exerted on a typical 7.5 lb baby when it is born by the following objects. [I want all forces expressed in Newtons]

1. The Sun
2. The Moon
3. The planet Jupiter
4. The planet Saturn
5. The 150 lb doctor/midwife standing 2ft away
6. How would these forces act on this typical baby? [Note: you will have to assume the location for the various objects – think vectors. A diagram will be a must!]
7. Which object has the greatest magnitude force?
8. Do you feel this force? Explain why or why not.

If you want to showcase your astrological knowledge you may...

1. Determine your astrological sign ☺
2. Determine the location of the above objects when you were born and hence the net force exerted on you. An appropriate force diagram is required.
3. Determine the resultant acceleration you felt (speculate on how this “force” influenced your future life's direction ☺)