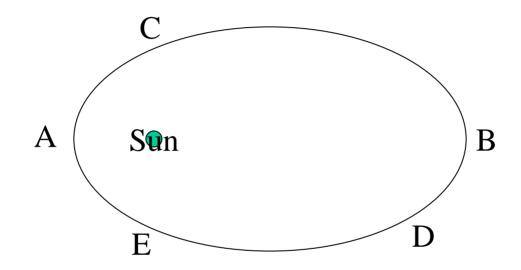


What point on the orbit is the acceleration the largest?

A B C D E





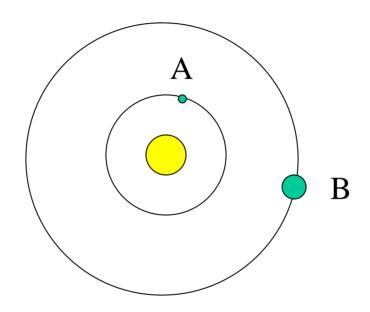


Which location in the orbit is the planet moving the fastest?

A B C D E







Planet B has 20 times more mass than planet A. Which planet has a larger acceleration?

A B C) It is not possible to tell

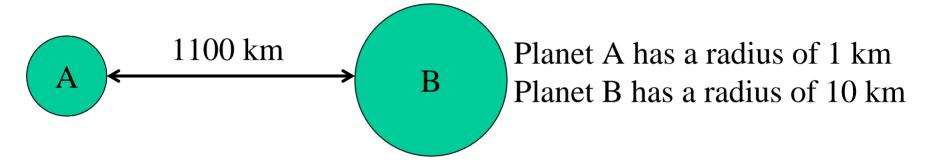


Why is an astronaut in orbit weightless?

- A). Because they are always in free fall, but constantly miss the Earth.
- B). Because gravity from the Earth and moon cancels.
- C). Because gravity from the Earth and Sun cancels.
- D). Because there is no gravity in space.



$$F = \frac{Gm_1m_2}{r^2}$$
; $G = 6.673E - 11\frac{Nm^2}{kg^2}$



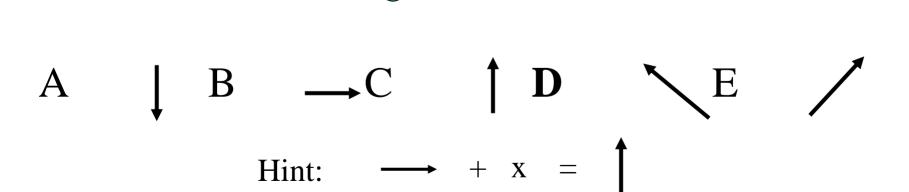
What distance would we use for r in Newton's formula for gravity? Note you must use kg and m for the formula to work.

A). 1000 m B). 1000 km C). 1111.0 km **D). 1111.E3 m** E). 1110.E6 m





Jane is running east with a speed of 2 m/s. When she gets directly south of Susan, she throws the ball at 2 m/s. What directions should she throw the ball?



Susan

Jane 🕒