If the Earth were to suddenly double its mass, what would happen to the Moon's orbital period? The Moon would

- vanish
- stay the same
- decrease
- increase
- Can't Tell
Newton's Laws

1. A body at rest stays at rest, and a body in motion moves at a constant speed.

2. A force acting on a body causes it to accelerate in the direction of the force.

3. For every force on a body, there is an equal and opposite force acting on another body.

When you put on a car's brakes, which one of Newton's Laws do you feel?

- First
- Second
- Third
- All of them

You feel...
Which control makes you accelerate?

- Windshield wipers
- All of the above
- Steering wheel
- Gas pedal
- Brakes

Which control makes you accelerate?
Orbital times

Comet Hyakutake has an orbital period of 65,000 years.

Comet Hale-Bopp has an orbital period of 4,000 years.

What determines their respective orbital periods?

Their average distance from the Sun (semimajor axis)
Their minimum distance from the Sun (perihelion)
Their maximum distance from the Sun (aphelion)
Their mass (weight)