

The Original “Moon Test”

Assuming that the radius of the Earth is 3500 Italian miles (5000 ft per mile), then the *conatus a centro* at the equator of the Earth amounts to a distance of receding from the surface of 0.04625 feet in the first second, compared with the distance of 16 feet of fall in the first second from gravity.

That is, gravity is 346 times stronger than the *conatus a centro* of objects at the equator of the rotating Earth. {Correct value, 288}

Assuming that the Moon is 60 Earth-radii from the center of the Earth and the period of the Moon is 27.3216 days, then the *conatus a centro* at the equator of the Earth is about 12½ times the *conatus a centro* of the Moon to recede from the Earth.

“Therefore, the force of gravity [at the surface of the Earth] is 4000 and more times greater than the endeavour of the Moon to recede from the centre of the Earth.” – in fact, 4375 times greater.

{But if the Earth’s gravity is holding the Moon in orbit and gravity varies in an inverse-square ratio with distance from the center of the Earth, then, assuming the Moon is 60 Earth-radii from the Earth, the force of gravity should be 3600 times greater than the endeavour of the Moon to recede. The comparison thus gives reason to conclude that the Moon is not held in orbit by inverse-square terrestrial gravity.}