Questions # 29125

what is range of gravitation and at which height gravity is zero?

The force of gravity is expressed with a formula as

$$F = G * \frac{M*m}{r^2},$$

where G is the gravitational constant, M and m – masses of bodies (if we're talking about the Earth' gravity, M is the mass of Earth, and r is the distance between the objects).

What should be remarked is that the gravity force decays with distance as a function $\frac{1}{r^2}$ (inverse square), so it reaches very small magnitudes as objects grow further, but does not technically ever reach zero.

The range of gravitational interaction is infinite.

Refer to http://en.wikipedia.org/wiki/Fundamental_interaction to compare gravitational interaction with other fundamental interactions and their range.