Tarique Blue

EET 3132

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***Remote Sensing Ch.4 HW***

**1)**

**2) If , then the period of the circular orbit is:**

**3) Period of a Circular orbit @ Earth's surface:**

**Velocity:**

**4)**

|  |  |  |
| --- | --- | --- |
| Planet | Period (Days) | Semi-Major Axis (Meters) |
| Mercury | 88 | 57909 |
| Venus | 225 | 108208 |
| Earth | 365 | 149598 |
| Mars | 686 | 2.27E+11 |
| Jupiter | 4333 | 7.78299E+11 |
| Saturn | 10759 | 1429000000 |
| Uranus | 30689 | 2875000000 |
| Neptune | 60182 | 4504000000 |
| Pluto | 90581 | 5.915E+12 |

**It obeys Kepler's 3rd law, which states that .**

**5)**

**6) No, You cannot see Antarctica from a Geo orbit because the earth's gravity would pull the satellite and eventually crash to the surface.**

**7) Radius @ Perigee= 1.5= 9.57**

**Radius @ Apogee= 3= 19.14 x**

**Velocity @ Apogee = 3.73 km/s**

**Velocity @ Perigee= 7.44 km/s**