1. The path of each planet is an **ellipse**, with the sun as a **focus**

2. The planets move faster the closer they are to the Sun, but **sweep out equal areas in equal time**

3. The square of the orbital period is directly proportional to the cube of the semi-major access of its orbit.

$$P^2 = \frac{4\pi^2}{k^2(M_{\text{Sun}} + M_{\text{Earth}})}a^3$$

Sweeping out equal area in equal time