

Keplers Laws Activity

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Sect 4

4. No, different distances
5. They would be the same distance

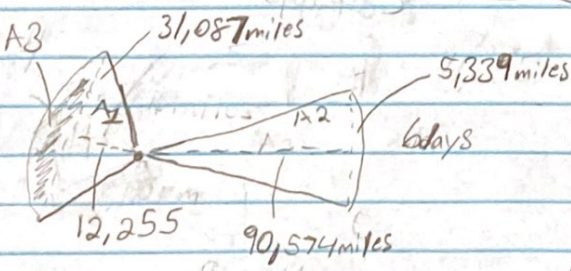
Sect 5

2. It goes off in a straight line.
3. It gets weaker
4. If shorter, the orbit becomes more elliptical. If longer, the Planet escapes the stars gravity.

Sect 6

2. Mass does not affect the acceleration downward on Earth nor w/ the planets.

3.



$A1 = \frac{1}{2}(31,087)(12,255)$
 $A1 = 1.9049 \cdot 10^8 \text{ miles}^2$
 $A2 = \frac{1}{2}(5,339)(90,574)$
 $A2 = 2.418 \cdot 10^8 \text{ miles}^2$
 $A1/A2 = .79 \Rightarrow 2\% \text{ difference.}$

A2 is 20% bigger than A1, however A1 does not account for A3.