

Kepler's Third Law

Adam Killam

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Mercury

$$\begin{aligned}\frac{R^3}{T^2} &= \frac{57.9^3}{88^2} \\ &= 25.1\end{aligned}$$

Venus

$$\begin{aligned}\frac{R^3}{T^2} &= \frac{108.2^3}{224.7^2} \\ &= 25.1\end{aligned}$$

Earth

$$\begin{aligned}\frac{R^3}{T^2} &= \frac{149.6^3}{365.2^2} \\ &= 25.1\end{aligned}$$

Mars

$$\begin{aligned}\frac{R^3}{T^2} &= \frac{227.9^3}{687^2} \\ &= 25.1\end{aligned}$$

Jupiter

$$\begin{aligned}\frac{R^3}{T^2} \\ &= \frac{778.6^3}{4331^2} \\ &= 25.2\end{aligned}$$

Saturn

$$\begin{aligned}\frac{R^3}{T^2} \\ &= \frac{1433.5^3}{10474^2} \\ &= 26.9\end{aligned}$$

Uranus

$$\begin{aligned}\frac{R^3}{T^2} \\ &= \frac{2872.5^3}{30589^2} \\ &= 25.3\end{aligned}$$

Neptune

$$\begin{aligned}\frac{R^3}{T^2} \\ &= \frac{4495.7^3}{59800^2} \\ &= 25.4\end{aligned}$$

Pluto

$$\begin{aligned}\frac{R^3}{T^2} \\ &= \frac{5906.4^3}{90560^2} \\ &= 25.1\end{aligned}$$