

Planet Size (radius using formula)			
Star/ Planet	Brightness Drop - Z (%)	\sqrt{Z}	Radius = $10 \times \sqrt{Z}$ (in Earth radii)
A			
B			
C1			
C2			
D1			
D2			
E			

Orbit Distance (from Kepler's 3rd Law graph)		
Star/ Planet	Period (T in years)	Orbit Distance (in AU)
A		
B		
C1		
C2		
D1		
D2		

Worksheet 3:

Orbit Distance

from Kepler's 3rd Law formula

Star/Planet	Period (T in years)	T^2	Orbit Distance = $\sqrt[3]{T^2}$ (in AU)
A			
B			
C1			
C2			
D1			
D2			

CUBE ROOTS

Number	Cube Root	Number	Cube Root
0.0025	0.136	0.18	0.565
0.0050	0.171	0.2	0.585
0.0075	0.196	0.22	0.604
0.0100	0.215	0.24	0.621
0.0100	0.215	0.26	0.638
0.02	0.271	0.28	0.654
0.03	0.311	0.3	0.669
0.04	0.342	0.32	0.684
0.05	0.368	0.34	0.698
0.06	0.391	0.36	0.711
0.07	0.412	0.38	0.724
0.08	0.431	0.4	0.737
0.09	0.448	0.5	0.794
0.1	0.464	0.6	0.843
0.12	0.493	0.7	0.888
0.14	0.519	0.8	0.928
0.16	0.543	1	1.000