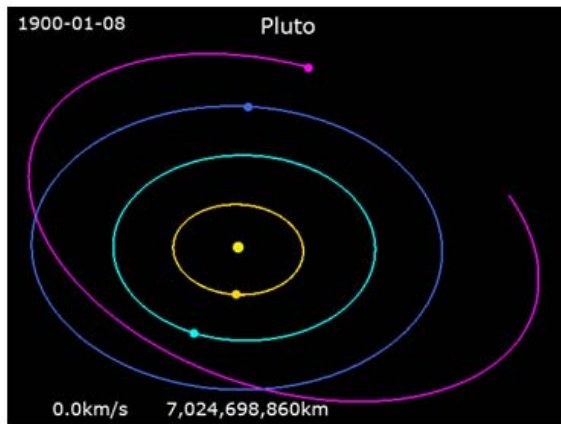


#8 Is Neptune Slow or Fast?

Problem 1 – How fast does Neptune orbit the sun?

$R = 30 \text{ AU} = 4.3 \text{ billion km}$
1 orbit = 150 years

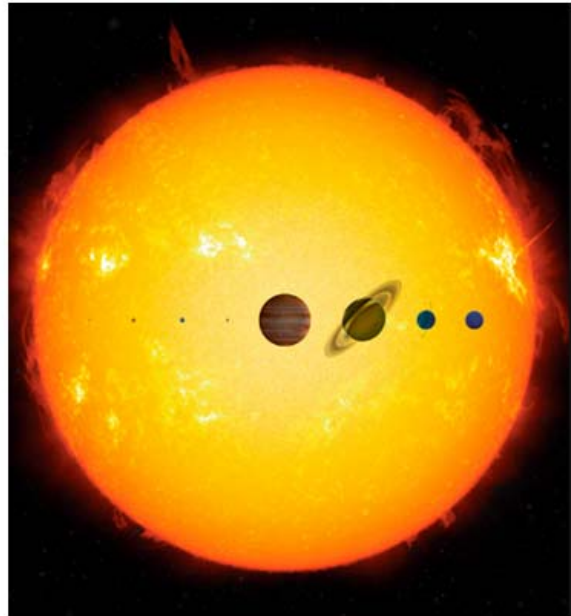


#9 Hunting for Planets like Earth

Problem 1 – If the sun is 160-mm on your photograph, what is the area of the Sun's disk in square millimeters?

Problem 2 – If Venus is 1.5mm, what is the area of Venus?

Problem 3 – If Jupiter is 16.4mm, what is the area of Jupiter?



Problem 1 What is the volume of the new ring in cubic kilometers?

Inner radius = 6 million km

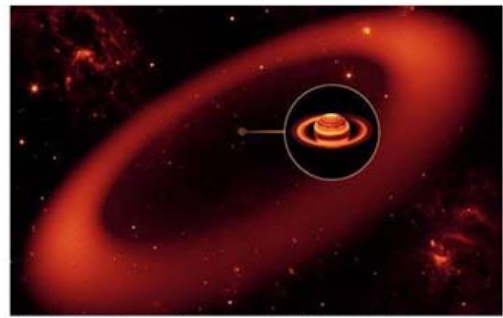
Outer radius = 12 million km

Thickness = 2.4 million km

Problem 52 - How many Earths can be fit within the volume of Saturn's new ice ring?

Radius of the Earth is 6,378 km

#10 Supersized Ring Discovered Around Saturn



Artist rendering of the new ice ring around Saturn detected by the Spitzer Space Telescope.

#11 Calculating a Transfer Orbit

