Answer on Question #78230,Chemistry/ General Chemistry

Mars is 33.9 million miles from the Earth. The Apollo 10 spacecraft traveled speeds of 39,000 km/h. If we traveled using the Apollo spacecraft, how many days would it take to reach mars?

Solution

1 mile = 1.60934 km

33.9×10^6 miles = 33.9×10^6×1.60934 = 5.46×10^7 km

S=v×t

t= S/v

t= 5.46×10^7/39,000 = 1398.89 h

1 day= 24 hours

1398.89 hours/24 hours/day = 58.29 days

Answer: 58.29 days