



An asteroid orbits a star in an elliptical orbit with a periastron (closest approach) of 13.5 AU and an apastron (farthest distance) of 98.7 AU. What are the semimajor axis and the eccentricity of the asteroid's orbit?

Why?

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**Check your Why? with Mr. C before continuing.**

How?

**Show all work including substitution with units.**

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Open the short cut **IP El Orbit** in the folder on one of the lab stations.  
 Enter the answer you found above. Check your answer by hitting the check button.  
 If your answer is not correct follow the interactive steps below the problem to work through the solution. Write the correct steps with solution on the back of this page.