

Name \_\_\_\_\_

Date \_\_\_\_\_

**Calculating AU, Constellations, and Motions of the Earth**

1) What number do we use to convert miles to kilometers? In other words, one mile is how many kilometers? \_\_\_\_\_

2) The from downtown Houston to Galveston is about 50 miles. How many kilometers is that? SHOW YOUR WORK and don't forget to INCLUDE UNITS!

\_\_\_\_\_

3) What is an AU? How far is an AU in miles and kilometers? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4) Explain how astronomers calculate solar distances: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5) Mars takes 1.88 Earth years to travel around the sun. That is approximately 687 Earth days. What is Mars's AU or solar distance? SHOW YOUR WORK!!

6) Planet "Mickey Mouse" take 2.76 Earth years to orbit the sun. What is "Mickey Mouse's" AU? SHOW YOUR WORK!!!

7) What is a constellation and how many constellations are there?

---

---

---

8) \_\_\_\_\_ is how far an object (star) seems to be from Earth; however, \_\_\_\_\_ is the actual distance a star or another object really is.