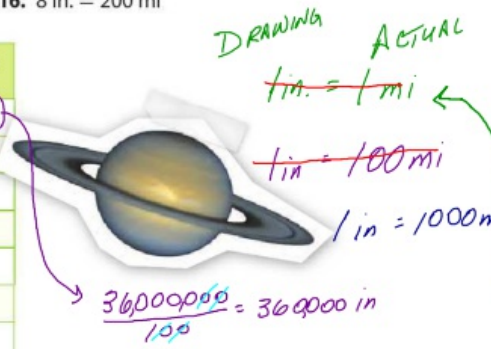


17. **STEM** The 8 planets' distance from the sun is shown.

- a. What scale would you use to create a scale drawing?
 - b. Use grid paper and your scale from part a to create a map of the four planets closest to the sun.
18. You build a model with a scale of 1:25. Your friend builds a model of the same object with a scale of 1:50. Which model is bigger? Explain.

Planet	Distance from the Sun (mi)
Mercury	3.6×10^7
Venus	6.7×10^7
Earth	9.3×10^7
Mars	1.42×10^8
Jupiter	4.84×10^8
Saturn	8.87×10^8
Uranus	1.8×10^9
Neptune	2.8×10^9



$3.6 \times 10^7 \text{ in} = 3.6 \times 10^7 \text{ mi}$

$1 \text{ in} = 1000 \text{ mi}$
 $36000 \text{ in} = 3.6 \times 10^7$
 $3000 \text{ ft} = 3.6 \times 10^7$

DRAWING ACTUAL
 $1 \text{ in} = 1,000,000 \text{ mi}$
 $\text{in} = 3.6 \times 10^7 \text{ mi}$
 $36 \text{ in} = 3.6 \times 10^7 \text{ mi}$