

Check-In: Questions 3–4

3. Luis made a table to show the estimated distance each planet is from the sun. He forgot to complete some of this table. Use what you know about writing numbers in expanded form and in shorter form using exponents to complete the table.

Planet	Approximate Distance from the Sun (miles)	Distance from the Sun Expanded Form	Distance from the Sun Using Exponents
Mercury	40,000,000	$4 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10 =$	
Venus	70,000,000		7×10^7
Earth	90,000,000	$9 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10 =$	
Mars	100,000,000		
Jupiter	500,000,000		$5 imes 10^8$
Saturn	900,000,000		
Uranus	2,000,000,000		2 × 10 ⁹
Neptune	3,000,000,000		

- **4.** The NASA Apollo missions included six manned spacecraft landings on the moon. The average distance between Earth and the moon is about 200,000 miles.
 - **A.** How many total miles were traveled to complete the six manned landings? Show or tell how you found your answer.



B. Round your answer to the nearest million. Write the number in standard form, expanded form, and in shorter form using an exponent.