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## Homework

1. A. On Earth, Professor Peabody weighs 148 pounds with his space suit on. How much does he weigh in ounces? Complete the table.

Input Output

| Weight in Pounds | Weight in Ounces |
| :---: | :---: |
| 1 | 16 |
| 2 | 32 |
| 4 | 64 |
|  | 80 |
| 100 | 800 |
| 148 | 1600 |


B. Write a rule to find the weight in ounces when you know the weight in pounds.
C. On the moon, Professor Peabody weighs about 24 pounds with his space suit on. Use the rule or function table to find his weight in ounces on the moon. Show or tell how you know.


Professor Peabody on the Moon
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2. On Earth, Professor Peabody took off his 160 -ounce moon boots to weigh himself. If he weighs 148 pounds on Earth with his boots on, how much does he weigh with his boots off? Show or tell how you know.
3. A. Professor Peabody knows his mass is the same on the moon and on Earth. His mass is 67 kilograms. Complete the table to find Professor Peabody's mass in grams.

B. Write a rule to find the mass in grams when you know the mass in kilograms.
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4. A. Look at the function table below. Nicholas is trying to write the rule to find the distance in centimeters when he knows the distance in meters. Complete the table.

| Input | Output |
| :---: | :---: |
| Distance <br> in Meters | Distance <br> in Centimeters |
| 1 | 100 |
| 2 |  |
|  | 500 |
| 10 | 1000 |
| 100 |  |
| 1000 |  |


B. Which rule do you agree with? Explain.
5. Nicholas rolled three cars down a ramp. Look at the measurements he recorded for each car. Which car rolled the farthest? Show or tell how you know.

| Trial | Distance Car Traveled |
| :---: | :---: |
| Car 1 | 2 meters and 140 centimeters |
| Car 2 | 3.8 meters |
| Car 3 | 315 centimeters |

