**HESI Unit Conversion - Dimensional Analysis**

**Example 1: Convert 48 inches to feet**

 **GIVEN KNOWN ANSWER**

**Example 2: Convert 72 fluid ounces to liters**

**Convert the following:**

1. **85ml to L**
2. **0.075 L to ml**
3. **2 feet to inches**
4. **45 inches to feet**
5. **6 cups to ml**
6. **2.4 L to quarts**
7. **6 pounds, 10 ounces to grams**
8. **5 feet, 3 inches to cm**
9. **1 Tbs to ml**
10. **64 fl. oz to gallons**
11. **A nurse is doing an intake/output comparison. The patient had an output of 1500 ml. The intake sheet recorded two 8 ounce cups of coffee, cups of water, and 3 cups of lime gelatin dessert. Does the patient’s output match intake?**
12. **Amy measures a child’s weight at 39.5 kg. How many pounds is this?**
13. **Aaron must tell a child’s mother how to measure a 20 ml liquid p.o. drug order at home. How many teaspoons should Aaron tell the mother to give?**
14. **An infant is using a liquid ready-to-feed formula. The infant requires 4 fluid ounces of formula every three hours day and night. How many quarts per week should the mother purchase?**
15. **A granular fiber supplement says to dilute contents in 120 ml of water. How many cups is this?**
16. **Mrs. Bates’ temperature one morning was 37.7 degrees Celsius. What is this in Fahenheit?**
17. **A drug must be stored below 35 degrees F. What is this in Celcisu?**
18. **Patient X receives 5 mg of Valium at 0600. What time should this be administered? \_\_AM/PM**
19. **Patient Y receives suction every three hours. His first suction was at 1600 on Monday. By 0700 Tuesday how many suctions should Patient Y have received?**
20. **Patient Z’s physical activity log states that he walked miles one week. How many kilometers is this?**

**Answer Key**

1. **0.085 L**
2. **75 ml**
3. **27 in**
4. **feet**
5. **2.5 qts**
6. **3011 g (approx.)**
7. **157.5 cm**
8. **22.5 ml**
9. **gal**
10. **No. I = 1740ml , O =1500ml**
11. **87 lbs (rounded)**
12. **4 tsp**
13. **7 qts.**
14. **cup**
15. **1.7 C**
16. **6 AM**
17. **6 times**
18. **7.2 km**