

## Measurements: Physician

### Idaho Physical Medicine & Rehabilitation

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#### Problem:

You are the physician caring for an 8 year old boy in the hospital. He weighs 62 pounds. You need to calculate a flow rate for his IV fluids. You use the following rule of thumb to determine the appropriate flow rate:

4 cc per hour per Kg for the first 10 Kg of bodyweight.  
(1 Kg = 2.2 pounds)

Plus 2 cc per hour per Kg for the next 10 Kg of bodyweight

Plus 1 cc per hour per Kg for bodyweight over 20 Kg.

How fast should this boy's IV run in cc per hour?

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### Solution:

Convert 62 pounds to Kg.

$$62 \text{ lbs.} \div 2.2 \text{ lbs./Kg} = 28 \text{ Kg}$$

$$\text{First 10 Kg: } @ 4\text{cc/hKg} = 40 \text{ cc/h}$$

$$\text{Second 10 Kg: } @ 2\text{cc/hKg} = 20 \text{ cc/h}$$

$$\text{Final 8 Kg: } @ 1\text{cc/hKg} = 8 \text{ cc/h}$$

**Answer: 68 cc/h**