Answer on Question #60195 – Math – Algebra

Question

You receive a prescription for a drug to be given in a dose of 5 mg/m2. Calculate the dose of the drug for a patient with a BSA of 1.25m2. Solve the problem using both ratio and proportion and dimensional analysis.

Solution

Method 1

Ratio and proportion

5 : 1

a : 1.25

5×1.25 = a ×1

a = 5×1.25÷1 = 6.25 (mg).

Method 2

Dimensional analysis

1 dose $\times\frac{5\ mg}{1\ m^2}\times\frac{1.25m^2}{dose}$ = 6.25 mg

Answer: 6.25 mg.