IV Flow Rates

Nursing

Drops per minute for a gravity set, millilitres per hour for a pump.

A pump wants millilitres per hour. A gravity set wants drops per minute and a drop factor.

gtt/min = (mL × drop factor) ÷ minutes

1000 mL, 8 h, 20 gtt/mL — **42 gtt/min**

1000×20÷480

500 mL, 4 h, 15 gtt/mL — **31 gtt/min**

500×15÷240

Pump: 1000 mL over 8 h — **125 mL/h**

Volume ÷ hours

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× Using hours where the formula wants minutes.

✓ Converting the time to minutes first.

Drop rate is per minute, so an infusion time left in hours produces a rate sixty times too fast and an infusion that runs through in minutes.

Educational reference. Hypothetical figures. Drop factors are printed on the giving set; infusion rates follow the prescription and local policy.