9 ADMINISTRATION OF BLOOD COMPONENTS

9.6 Calculating a Blood Transfusion Rate

GUIDE:

1 drop = 1 minim
20 minims = 1 ml
1 ml = 20 drops

Formula to determine the time required for infusion of blood to be completed

\[
\frac{\text{Prescribed volume calculated in millilitres}}{\text{Prescribed drops per minute}} \times \frac{\text{Prescribed minims per millilitre}}{60} (\text{minutes in 1 hour})
\]

eg 400ml at 40 drops per minute

Calculated

\[
\frac{400 \times 20}{40 \times 60} \text{ simplified } \frac{10 \times 1}{3}
\]

= \frac{10}{3}

= (3 \ 1/3rd hours)

= 3 hours 20 minutes

Reference:
Department of Nursing and Midwifery Education, KEMH. Medication paper for registered nurses and midwives. June 2005