



## Drops per minute (DPM)-Worksheet Answers

### Answer 1

Total volume = 280 ml

Total time to administer = 4 hours

Drop factor = 60

So, Drops per minute (DPM) =

$$\frac{280}{4} \times \frac{60}{60} = \frac{280}{4} = 70 \text{ drops per minute}$$

### Answer 2

Total volume = 750 ml

Total time to administer = 6 hours

Drop factor = 20

So, Drops per minute (DPM) =

$$\frac{750}{6} \times \frac{20}{60} = \frac{15000}{360} = 41.66$$

### Answer 3

Total volume = 3 L = (3 × 1000) = 3000 mls

Time = 6 hours

Drop factor = 15

So, Drops per minute (DPM) =

$$\frac{3000}{6} \times \frac{15}{60} = \frac{3000}{24} = 125$$



**Answer 4**

Total volume = 1500 mls

$$\text{Time} = 480 \text{ minutes} = \frac{480}{60} = 8 \text{ hours}$$

Drop factor = 15

So, Drops per minute (DPM) =

$$\frac{1500}{8} \times \frac{15}{60} = \frac{1500}{32} = 46.87$$

**Answer 5**

Total volume = 950 ml

Infusion rate = 120 ml/hr

Drop factor = 60 (micro drip set can only have drop factor 60)

We can write the DPM formula like this,

$$\text{Drops per minutes} = \text{Infusion rate} \left( \frac{\text{ml}}{\text{hr}} \right) \times \frac{\text{Drop factor}}{60}$$

$$\text{So, from Example 3, DPM} = 120 \times \frac{60}{60} = 120$$

**Answer 6**

Drop factor = 60

DPM = 200

Volume remaining = 2.25 L = 2250 mls

So, Time remaining =

$$\frac{2250}{200} \times \frac{60}{1} = \frac{225 \times 6}{2} = 675 \text{ minutes}$$

Convert the minutes into hours,

$$(675 \div 60) \text{ hour} = 11.25 \text{ hours}$$