

# Clinical Calculations Practice Calculations Test

For staff attending orientation – please bring this completed test to the Nursing Midwifery Orientation Day

Standard Drop Factor		
* Applies to 1000ml bags		
volume to be infused x 20 drops per ml		1
time in minutes		
Time in hours	24	14 drops/min
	18	18 drops/min
	12	28 drops/min
20 drops = 1ml	10	33 drops/min
	8	42 drops/min
	6	55 drops/min
	4	83 drops/min

Buretrol Drop Factor		
volume to be infused x 60 drops per ml		
time in minutes		1
Time in hours	24	42 drops/min
	18	55 drops/min
	12	83 drops/min
60 drops = 1ml	10	100 drops/min
	8	125 drops/min
	6	167 drops/min
	4	250 drops/min

1g = 1000mg = 1,000,000mcg
1 mg = 1000mcg
1mcg = 0.001mg

Drug Formula	
what you want x quantity it comes in	1
what you have	

1:1000 = 1g in 1000mls
1% = 1g in 100mls
5% = 5g in 100mls

**Canterbury**

Christchurch Hospital  
Authorised by Director of Nursing  
Date: January 2002

(4) June 2008

1

REGULAR DRUGS		MONTH		DATE	
Drug, Dose and Directions (capital letters)	Date	Time	Other		
Frusemide 90 mg BD (20mg in 1ml)	8/1/13	0700			
	Route IV	0800			
	Stop date & initials	1200			
Indication		1400			
Signature		1700			
Pager		2100	2500		
Surname (capitals) Jones					

How many mls do you give per dose?

2

Drug, Dose and Directions (capital letters)	Date	Time	Other
Aminophylline 300 mg (250mg in 10ml) Daily	8/1/13	0700	
	Route IV	0800	
	Stop date & initials	1200	
Indication		1400	
Signature		1700	
Pager		2100	
Surname (capitals) Jones			

How many mls do you give per dose?

3

As Required (P.R.N.) Drugs		Date	Time	Dose
Drug	Diazepam	Date	8/1/13	
Dose	2mg (10mg/2ml)	Route	IV	
Frequency	hourly	Stop date & initials		
Maximum dose in 24 hours	10mg	Pharmacy code		
Tick if drug is also charted regularly	<input type="checkbox"/>			
Indication	Seizures			
Signature	Jones			
Pager	555			
Surname (capitals)	Jones			

How many mls do you give per dose?

4

Drug, Dose and Directions (capital letters)	Date	Time	Other
Ceftriaxone 1g TDS	8/1/13	0700	
	Route IV	0800	
	Stop date & initials	1200	
Indication		1400	1600
Signature	Jones	Pharmacy code	1700
Pager			2100
Surname (capitals)	Jones		2400

How mgs will the patient receive at 1600hrs?

5

Drug, Dose and Directions (capital letters)	Date	Time	Other
Digoxin 0.5mg Daily	8/1/13	0700	
	Route PO	0800	
	Stop date & initials	1200	
Indication		1400	
Signature	Jones	Pharmacy code	1700
Pager			2100
Surname (capitals)	Jones		

How mcgs will the patient receive per dose?

6

Drug, Dose and Directions (capital letters)	Date	Time	Other
Augmentin 1.2g BD	8/1/13	0700	
	Route IV	0800	
	Stop date & initials	1200	
Indication		1400	
Signature	Jones	Pharmacy code	1700
Pager			2100
Surname (capitals)	Jones		2000


How many mcgs will the patient receive at 0800hrs?

7

Drug, Dose and Directions (capital letters)	Date	Time	Other
Erythromycin 750mg BD	8/1/13	0700	
	Route PO	0800	
	Stop date & Initials	1200	
Indication		1400	
Signature	Jones	Pharmacy code	1700
Pager			2100
Surname (capitals)	Jones		2000


How many grams will the patient receive per dose?

8

Code	Date	Drug and Dose	Time to be Given	Route	Prescriber's Signature Surname Print
	8/1/13	Atropine 400 mcg	stat	IV	 Jones


How many mgs will the patient receive ?

9

Code	Date	Drug and Dose	Time to be Given	Route	Prescriber's Signature Surname Print
	8/1/13	Adrenaline 900 mcg	stat	IV	 Jones


How many grams will the patient receive?

10

Date	Line No.	Bag No.	Fluid, Volume and Additives	Duration or Rate	Prescriber's Signature
8/1/13			Sodium chloride 0.9% 500 mls	6 hrs ml/hr	 Jones


How many litres will the patient receive?

11

Date	Line No.	Bag No.	Fluid, Volume and Additives	Duration or Rate	Prescriber's Signature
5/1/13			Sodium Chloride 0.9% 1.8L	24 hrs ml/hr	 Jones


How many mls will the patient receive?

12

Date	Line No.	Bag No.	Fluid, Volume and Additives	Duration or Rate	Prescriber's Signature
6/1/12			Sodium Chloride 0.9% 1L	4 hrs ml/hr	 Jones


How many mls per hour will the patient receive?

13

Date	Line No.	Bag No.	Fluid, Volume and Additives	Duration or Rate	Prescriber's Signature
9/1/12			1 Unit RBC (350 mls) (standard giving set)	2 hrs ml/hr	 Jones

How many drops per minute will the patient receive?

14

Date	Line No.	Bag No.	Fluid, Volume and Additives	Duration or Rate	Prescriber's Signature
10/1/12			1L Sodium Chloride 0.9% (via buretrol)	10 hrs ml/hr	 Jones

How many drops per minute will the patient receive?

15

Drug, Dose and Directions (capital letters) Gentamicin 5mg/kg/day TDS (72 kg weight)	Date	8/1/13	Time	0700	Other	
	Route	IV		0800		
	Stop date & Initials		1200			
Indication			<del>1400</del>	1600		
Signature Pager Surname (capitals) Jones	Pharmacy code		1700			
			<del>2100</del>	2400		

What is the total daily dose?

What dose will the patient receive every 8 hours?

16

Drug, Dose and Directions (capital letters) Erythromycin 20mg/kg/day QID (72 kg weight)	Date	8/1/12	Time	<del>0700</del>	0200	
	Route	IV		0800		
	Stop date & Initials		1200			
Indication			<del>1400</del>			
Signature Pager Surname (capitals)	Pharmacy code		1700			
			<del>2100</del>	2000		

What is the total daily dose?

What dose will the patient receive every 6 hours?

Spare working space