

Date/Time Problems

1. Dr. ordered medication tid (3 times a day) X 3 days. First dose is at 10am on November 6. When is the last dose?
2. Dr. ordered medication q6h X 2 days. First done is at 9pm on April 12. When is the last dose?
3. Dr. ordered medication q8h X 4 days. First dose is at 1pm on December 16. When is the last dose?
4. Ordered 1 Gram antibiotic I.M qid X 2 days. The first dose is at 12noon, July 3. Our hospital qid-schedule is 8am – 12pm – 4pm – 8pm. What is the date and time of last dose?
5. Dr. ordered medication q36h X 5 doses. First dose is at 11am on April 2. What is date and time of last dose?

Date/Time Problem

Answer Key

1. 3 times a day for 3 days = 9 doses tid = q8h

Day 1	Day 2	Day 3
1.) 10am Nov 6 2.) 6 pm 3.) 2 am Nov 7	1.) 10 am 2.) 6 pm 3.) 2 am Nov 8	1.) 10 am 2.) 6 pm 3.) 2 am Nov 9

Answer = 2 am on Nov. 9

2. q6h = 4 times a day for 2 days

Day 1	Day 2
1.) 9pm on April 12 2.) 3am on April 13 3.) 9am 4.) 3pm	1.) 9pm 2.) 3am April 14 3.) 9am 4.) 3pm April 14

Answer = 3pm on April 14

3. q8h = 3 X a day for 4 days

Day 1	Day 2	Day 3	Day 4
1.) 1pm Dec 16 2.) 9pm 3.) 5am Dec 17	1.) 1pm 2.) 9pm 3.) 5am Dec 18	1.) 1pm 2.) 9pm 3.) 5am Dec 19	1.) 1pm 2.) 9pm 3.) 5am Dec 20

Answer = 5am on Dec 20

4. quid = 4 times a day for 2days

Day 1	Day 2
1.) 12pm July 3	1.) 12pm
2.) 4pm	2.) 4pm
3.) 8pm	3.) 8pm
4.) 8am July 4	4.) 8am July 5

Answer = 8am on July 5

5. 5 doses q 36 h

1.) 11am April 2
2.) 11pm April 3
3.) 11am April 5
4.) 11pm April 6
5.) 11am April 8

Answer = 11am on April 8

TBA Problems

1. A 1000ml bag of D5NS was hung at 9am. The pump is set at 75 ml/hr. You come on duty at 3pm. What should the TBA be when you check it at 3pm?
2. A 500 ml bag of NS was hung at 10pm. The flow is 80 ml/hr. What is the TBA at 4am?
3. A 1 Liter (1000ml) bag of D5NSwith 20 MEQ of KCL was hung at 2pm. The flow rate is 125 ml/hr. What is the TBA at 9pm?
4. A 1 Liter bag of $\frac{1}{2}$ NS was hung at noon. The flow rate is 150 ml/hr. What is the TBA at 5pm?
5. You come on duty at 11pm and see that there is 200 ml left in a 1 Liter bag of D5W. The pump is set at 100 ml/hr. Assuming continuous administration, what is the TBA at 5am?

4.



1000ml @ 1200hr
 ↓ } 5hr
 1700hr

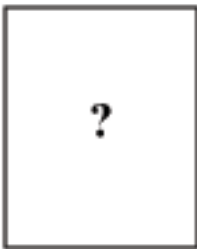
150ml / hr x 5hr = 750ml gone

$$\begin{array}{r} 1000\text{ml} \\ - 750\text{ml} \\ \hline 250\text{ml TBA} \end{array}$$

5.



— 200ml @ 2300hr



1000ml
 ↓ } 6hr
 0500hr

100ml / hr x 6hr = 600ml

600ml - 200ml in 1st bag = 400ml from new bag

$$\begin{array}{r} 1000\text{ml (newbag)} \\ - 400\text{ml} \\ \hline 600\text{ml TBA} \end{array}$$

Ahead / On Time / Behind Problems

1. A 1000ml bag was hung at 7am with a flow rate of 100ml/hr. When you check it at 11am the TBA is 750ml. Is this on time, ahead, or behind?
2. A 1 liter bag was hung at 3pm with a flow rate of 125ml/hr. When you check it at 8pm there are 325ml TBA. Is this on time, ahead, or behind?
3. A 500ml bag was hung at 11pm with a flow rate of 50ml/hr. When you check it at 4am there are 300ml TBA. Is this on time, ahead or behind?
4. A 1 liter bag was hung at 10pm with a flow rate of 75ml/hr. When you check it at 3am there are 624ml TBA. Is this on time, ahead or behind?
5. A 1000ml was hung at 9am with a flow rate of 80ml/hr. When you check it at 3pm there are 480ml TBA. Is this on time, ahead, or behind?

Ahead / On Time / Behind Problems

Answer Key

1. 1000ml bag

750ml	TBA	100ml	1000ml
600ml	expected	$\begin{array}{r} \times 4ml \\ \hline 400ml \end{array}$	$\begin{array}{r} - 400ml \\ \hline 600ml \text{ expected} \end{array}$

= Behind

2. 1000ml bag

375ml	Expected	125ml	1000ml
325ml	TBA	$\begin{array}{r} \times 5ml \\ \hline 625ml \end{array}$	$\begin{array}{r} - 625ml \\ \hline 375ml \text{ expected} \end{array}$

= Ahead

3. 500ml bag

300ml	TBA	50ml	500ml
250ml	expected	$\begin{array}{r} \times 5ml \\ \hline 250ml \end{array}$	$\begin{array}{r} - 250ml \\ \hline 250ml \text{ expected} \end{array}$

= Behind

4. 1000ml bag

625ml	TBA & expected	75ml	1000ml
		$\begin{array}{r} \times 5ml \\ \hline 375ml \end{array}$	$\begin{array}{r} - 375ml \\ \hline 625ml \text{ expected} \end{array}$

= On Time

5. 1000ml bag

520ml	Expected	80ml	1000ml
480ml	TBA	$\times \underline{6ml}$	$\underline{- 480ml}$
		480ml	520ml

= Ahead