
Lab exercises

Subject no. 1

Calculate and prescribe the necessary Acepromazine 1% to sedate a 35 kg dog, the dose is between 0,03-0,15 mg/kg bw, I.M. or I.V.

Subject no. 2

Calculate and prescribe the necessary Rimadyl (Carprofen), 25-/75-/100- mg tablets for a 27 kg dog, the dose is 2mg/kg bw, twice daily, for 7 days.

Subject no. 3

Calculate and prescribe the necessary Ceftiofur (Excenel) 5% for a 475 kg cattle, the dose is 1,1 mg/kg bw, I.M., once a day, for 3 days.

Subject no. 4

Calculate and prescribe the necessary Excenel (Ceftiofur 50mg / ml), for a 95 kg pig, the dose is 3mg/kg bw/day, I.M., for 3 days.

Subject no. 5

Calculate and prescribe the necessary Cimetidine 100mg / ml, fi x 2ml, for a 16 kg dog, the dose is 5 mg/kg, I.V., three times a day, for 3 days.

Subject no. 6

Calculate and prescribe the necessary Ciprofloxacin 100-/250-/500mg tablets, for a 5 kg cat, the dose is 5-15 mg/kg, twice daily, for 5 days.

Subject no. 7

Calculate and prescribe the necessary Dexamethasone (2mg/ml) for a 45 kg dog, the dose is 0,007-0,15 mg/kg bw, S.C., one administration every 2 days, 3 doses.

Subject no. 8

Calculate and prescribe the necessary Doxycycline 20-/50-/100 mg tablets for a 3 kg cat, the dose is 5-10 mg/kg bw, one administration per day, for 4 days.

Subject no. 9

Calculate and prescribe the necessary Dectomax (Doramectin 10mg/ml) for a 15 kg dog, the dose is 0,2 mg/kg bw., S.C., one administration.

Subject no. 10

Calculate and prescribe the necessary Enrofloxacin 10% for a 23 de kg dog, the dose is 2,5-10mg/kg bw., I.M., one administration per day, for 5 days.

Subject no. 11

Calculate and prescribe the necessary Enrofloxacin 10%, for a 425 kg cattle, the dose is 2,5-5mg/kg bw., I.M., one administration per day, for 3 days

Subject no. 12

Calculate and prescribe the necessary Finadyne (Flunixin meglumine 50mg/ml) for a 4 kg cat, the dose is 0,25 mg/kg bw., I.M., one administration per day, for 4 days.

Subject no. 13

Calculate and prescribe the necessary Furosemid (10mg/ml) for a 7 kg dog, the dose is 0,5-6mg/kg bw, I.V., 3 administrations per day, for 2 days.

Subject no. 14

Calculate and prescribe the necessary Genta-ject 10% (gentamicin) for a 22 kg dog, the dose is 2-4 mg/kg bw, I.M, twice a day, for 3 days.

Subject no. 15

Calculate and prescribe the necessary Hydrocortisone (fi x2ml/100mg) for a 13 kg dog, the dose is 5 mg/kg bw, I.V.

Subject no. 16

Calculate and prescribe the necessary Imizol (Imidocarb 120 mg/ml), 11 kg dog, the dose is 5-7,5 mg/kg bw, S.C, single administration.

Subject no. 17

Calculate and prescribe the necessary Metacam (meloxicam 0,5 mg/ml), oral suspension, for a 5,5 kg cat, the dose is 0,025 mg/kg bw, P.O., one administration per day, for 5 days.

Subject no. 18

Calculate and prescribe the necessary Metoclopramid fi x 2ml (5mg/ml) for a 5 kg dog, the dose is 0,2-0,5 mg/kg bw, S.C, twice daily, for 3 days.

Subject no. 19

Calculate and prescribe the necessary Metronidazole (500 mg/100ml) for a 42 kg dog, the dose is 15 mg/kg bw, I.V., twice daily, for 7 days.

Subject no. 20

Calculate and prescribe the necessary Ketamine 10% for a 450 kg horse, the dose is 2 mg/kg bw, I.V.

Subject no. 21

Calculate and prescribe the necessary Omeprazole (10-/20-/40 mg capsules) for a 18 kg dog, the dose is 0,7 mg/kg bw, P.O., once a day, for 14 days

Subject no. 22

Calculate and prescribe the necessary Phenobarbital (15-/ 20 mg tablets) for a 4,5 kg cat, the dose is 2-4 mg/kg bw, P.O., twice a day, for 7 days.

Subject no. 23

Calculate and prescribe the necessary Atropine (15mg/ml) for a 2,5 kg cat (intoxicated with organophosphates), the dose is 0,2 mg/kg bw, I.V., 4 administrations per day, for 1 day.

Subject no. 24

Calculate and prescribe the necessary Calcium gluconate sol. 10% for a 6 kg dog, the dose is 0,5-1,5 mg/kg bw, I.V., once a day, for 2 days.

Subject no. 25

Calculate and prescribe the necessary Imaverol 10% (Enilconazole) for bathing a 30 kg dog, bathing solution will have a concentration of 2%, 4 bathings shall be made, every 3 or

Subject no. 26

Calculate and prescribe the necessary Imodium (Loperamid) 2 mg capsules for a 4,5 kg dog, the dose is 0,1mg/kg bw, 3 administrations per day, for 2 days.

Subject no. 27

Calculate and prescribe the necessary Genta-Ject (Gentamicine 10%) for a 400 kg cattle, the dose is 2-3 mg/kg bw, I.M, once per day, for 4 day.

Subject no. 28

Calculate and prescribe the necessary Excenel (Ceftiofur 50 mg/ml) for a 500 kg horse, the dose is 1-5 mg/kg bw, I.M. or I.V., twice per day, for 5 days.

Subject no. 29

Calculate and prescribe the necessary Ivermectin 10 mg/ml (paste) for a 300 kg horse, the dose is 200 microg/kg bw, P.O., single administration.

Subject no. 30

Calculate and prescribe the necessary Calcium borogluconate 23% for a 400 kg mare, the dose is 150-250 mg/kg bw, I.V.. Calcium borogluconate comes in 100 ml vials.

Subject no. 31

Calculate and prescribe the necessary Lincomix 10% INJ (lincomycin) for a 80 kg pig, the dose is 10 mg/kg bw, I.M., once a day, for 3 days.

Subject no. 32

Calculate and prescribe the necessary Tylosin 20% for a 375 kg cattle, the dose is 12 mg/kg bw, I.M., once a day, for 4 days.

Subject no. 33

Calculate and prescribe the necessary Levamisol 7,5% for deworming 50 sheep with an average weight of 40 kg, the dose is 7,5 mg/kg bw., S.C.

Subject no. 34

Calculate and prescribe the necessary Oxytetracycline 10% for a 55 kg pig, the dose is 10 mg/kg bw, I.M., once a day, for 5 days.

Subject no. 35

Calculate and prescribe the necessary Rombendazol F (flubendazole 10mg) tablets, for 50 chickens with an average weight of 3 kg, the dose is 10 mg/kg, once a day, for 2 days.

Subject no. 36

Calculate and prescribe the necessary Calcium chloride for a 400 kg mare., in a 7,5% I:V: solution. The dosage is 0,10 g/kg bw, having 10 ml vials of 10% solution. Prescribe also the needed distilled water vials (10 ml).

Subject no. 37

Calculate and prescribe the necessary Neomicyn 4% for a 20 kg dog, the dosage is 3-5 mg/kg bw, I:M., once a day, for 4 days.

Subject no. 38

Calculate and prescribe the necessary Strychnine for a 15 kg dog, the dosage is 0,1 mg/kg bw, two S:C: administrations in a 1% solution, strychnine comes in 1 ml vials.

Subject no. 39

Calculate and prescribe the necessary Ivomec 10% for 3 pigs with the following weights: 120, 90 and 70 kg, knowing that the dose is 1ml / 33 kg, s.c. administration.

Subject no. 40

Calculate and prescribe the necessary Vetoprim 120 sol. 20% (Trimethoprim + Sulfadimidin +vitamines) for a 40 kg sheep, the dosage is 0,10g/kg bw, I:M., once a day, for 4 days.

Subject no. 41

Calculate and prescribe the necessary Chloralose, for a 6 kg dog, the dosage is 0,008 g/kg bw, I.V., in 1,2% concentration.

Subject no. 42

Prescribe the necessary Florosil for 120 piglets with ascaridiosis, the average weight of a piglet is 30kg, and the *pro dosis* quantity is 0,6 g/head. Is administered 3 times per day, for

Subject no. 43

Prescribe the necessary Florfenicol 10% for a 100 kg cattle, the dosage is 0,005g/kg bw, i.m., once a day, for 4 days.

Subject no. 44

Calculate the necessary Largactil (chlorpromazine) vials of 5 ml/100 mg active substance, for tranquilizing a 500 kg stallion, the dose is 0,001g/kg bw.

Subject no. 45

Calculate the necessary Panacur (fenbendazole) for a herd of 150 sheep, with an average weight of 45kg/sheep. The dose is 7,5 mg/kg bw, per os. Panacurul comes in 1l cans, in 10 % solution.

Subject no. 46

Calculate and prescribe the necessary Rompun 2% for a 550 kg stallion, the dose is 2 mg/kg bw., i.m.

1. Transform 200 ml of 15% solution in a 5% solution.
 2. Transform 50 ml of 3% solution in a 1% solution.
 3. Transform 75 ml of 30% solution in a 10% solution.
 4. Transform 30 ml of 30% solution in a 1.5% solution.
 5. Obtain 1500 ml of 5% solution from a 25% solution.
 6. Obtain 500 ml of 3% solution from a 17% solution.
 7. Obtain 900 ml of 7% solution from a 21% solution.
 8. Obtain 90 ml of 9% solution from a 5% solution.
 9. Obtain 500 ml of 10% solution from two solutions: one of 33% and the other of 5%.
 10. Obtain 2000ml of 27% solution from two solutions: one of 46% and the other of 14%.
 11. Obtain 1300 ml of 10% solution from two solutions: one of 15% and the other of 60%.
 12. Obtain 40 ml of 3% solution from two solutions: one of 7% and the other of 0.5%.
 13. What concentration has a Chloramine B solution which in 2000 ml contains 20 g of active substance?
 14. How much iodine is in 60 ml, of Pregl aqueous solution (0.045%)?
 15. How many grams of active substance there is in 5 litres of Valbazene (Abz) 11.36%?
 16. How many grams of active substance is in 2500 ml of Sulfahexidin 60%?
 17. Calculate the necessary Decconex (70%) for disinfection of a poultry hall with dimensions: L=12 m, l = 7m, h = 1.5 m, application norm is: 0,25 litre/m² solution 0,2%
 18. Calculate the necessary Sulfahexidin 60% for the disinfection of 650 m² knowing that the application norm is 0,15 l/m² at a concentration of 2%.
 19. Calculate the necessary caustic soda and formalin 40% for the disinfection of a warehouse with the following dimensiones L = 10 m, l = 5 m, h = 1.5 m, the application norm is 0.5l / m² for both substances, caustic soda in 2% solution and formalin in 3%
-

20. Prepare 8 t of fodder containing arsanilic acid in proportion of 120 ppm/t.
21. Prepare 12 t of fodder containing 40 ppm/t Lincomix.
22. Prepare 5 t of fodder / day containing 200 ppm/t Lincomix, for 21 days.
23. Prepare 7 t of fodder containing Colicrid 50% in proportion of 260ppm/t.
24. Extrapolate the dose of 10 mg/kg of a drug for human use, dose for an adult human (65 kg), for a 10 kg dog.

body weight in kg	body surface area in m ²
10	0.46
65	1.62

25. Extrapolate the dose of 3 mg/kg of a drug for human use, dose for an adult human (65 kg), for a 100 kg pig.
26. Extrapolate a dose of 3 tablets from human use for a 20 kg dog.
27. Extrapolate for a 10 kg dog a treatment with a human antiparasitic drug Descaris (Levamisol) administered for an 80 kg human (5mg/BW).
28. Extrapolate a 5mg/kg dose for adult human use for a 500 kg horse
29. Extrapolate the following dose: 2 tablets/ adult human, for a 300 kg foal.

body weight (kg)	metabolic body weight (kg ^{0,75})
65	22,9
300	72,1
500	105,7