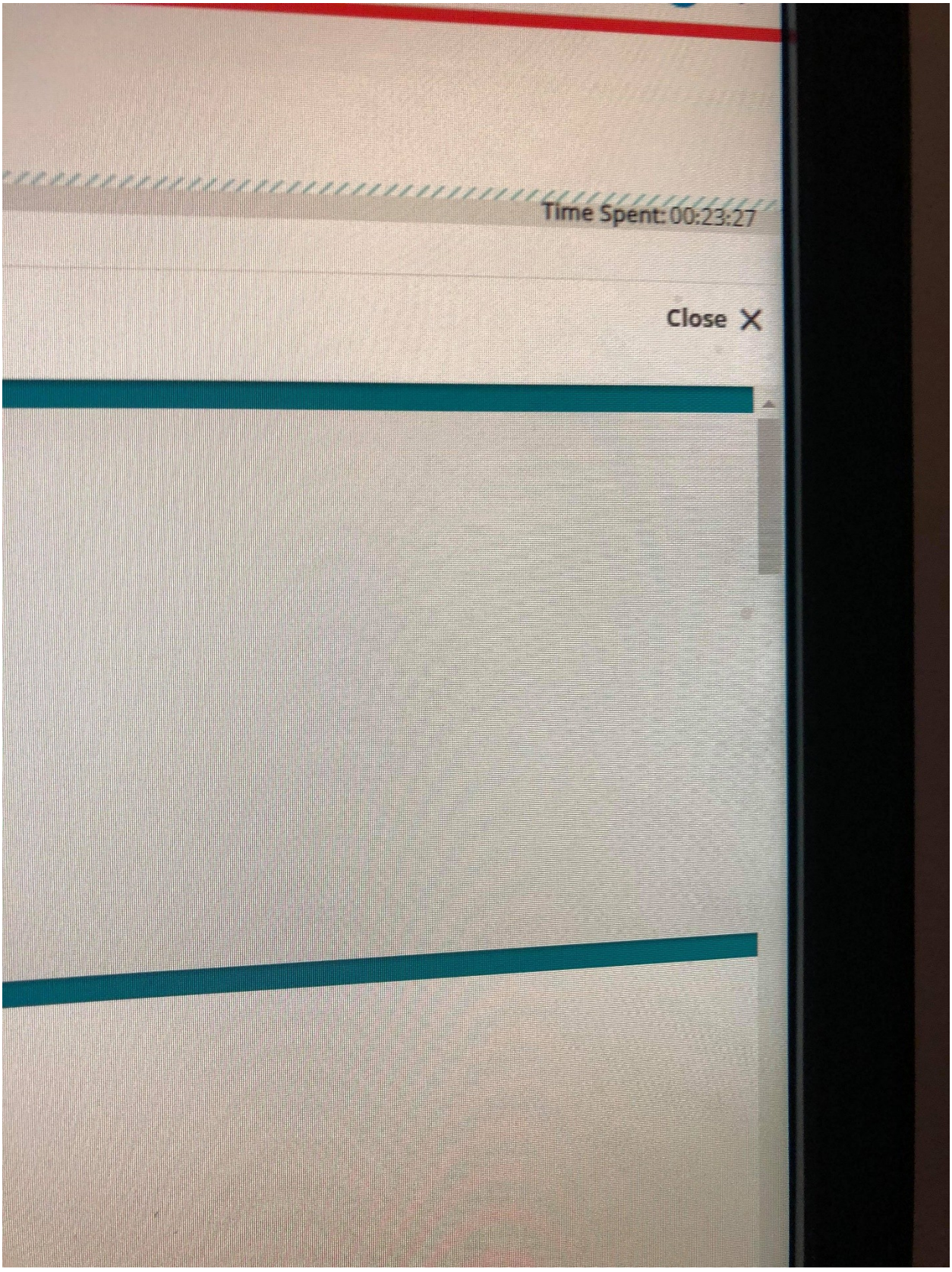
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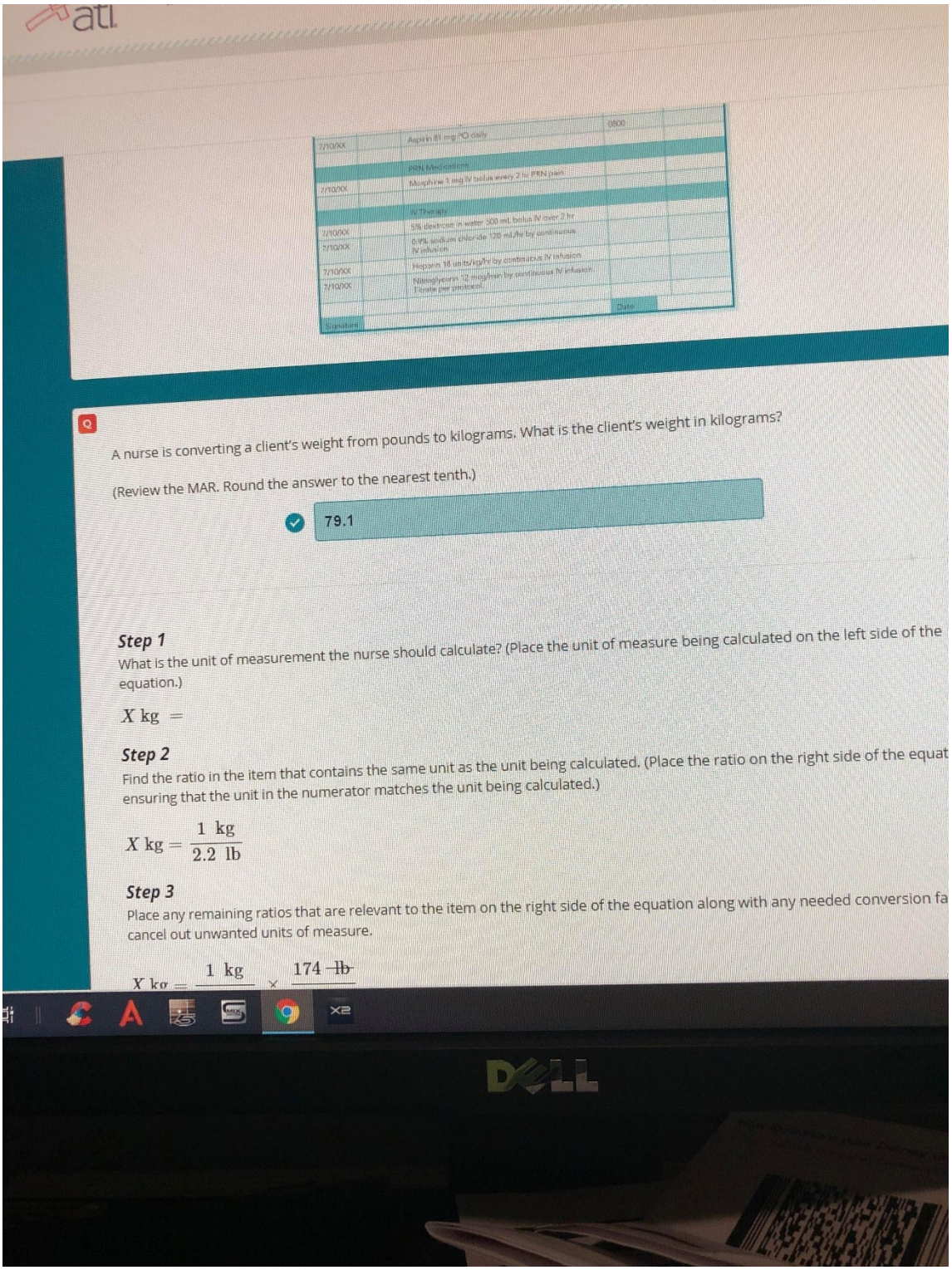
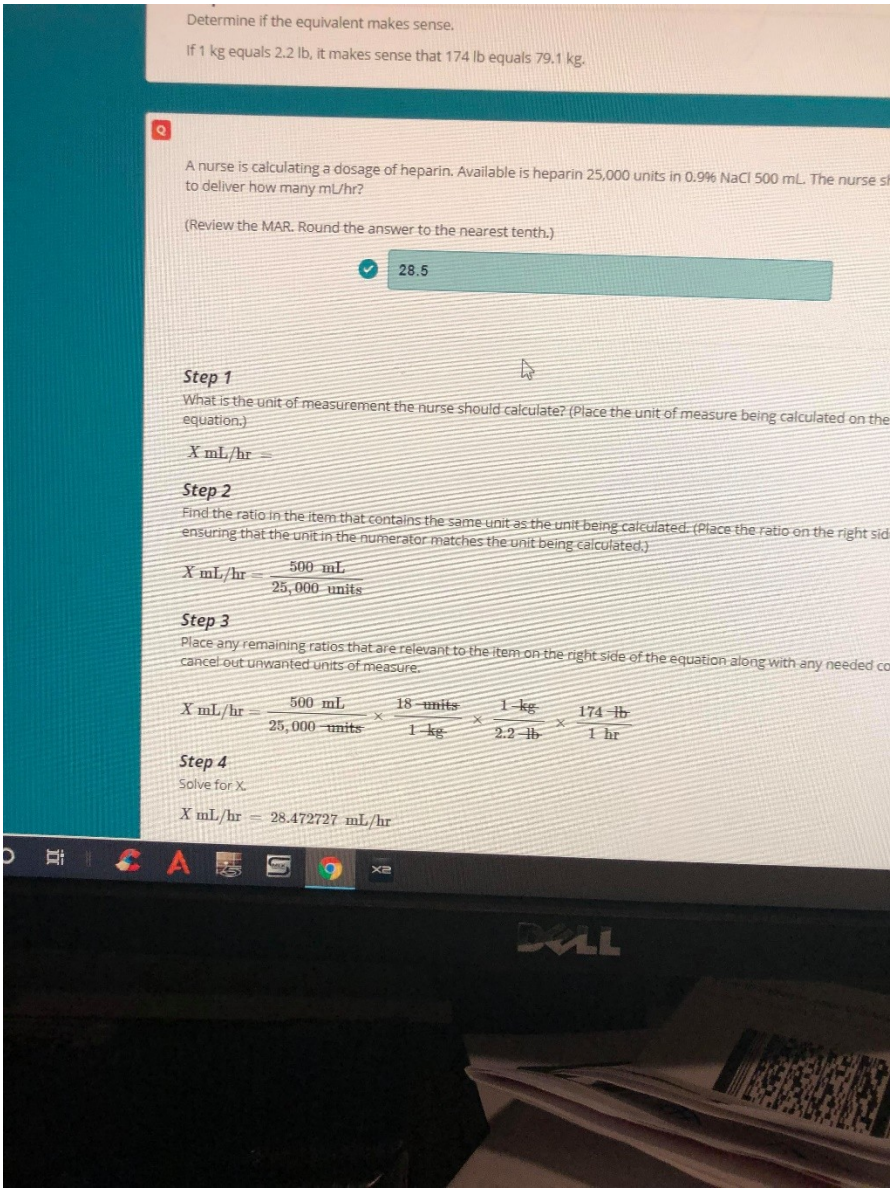
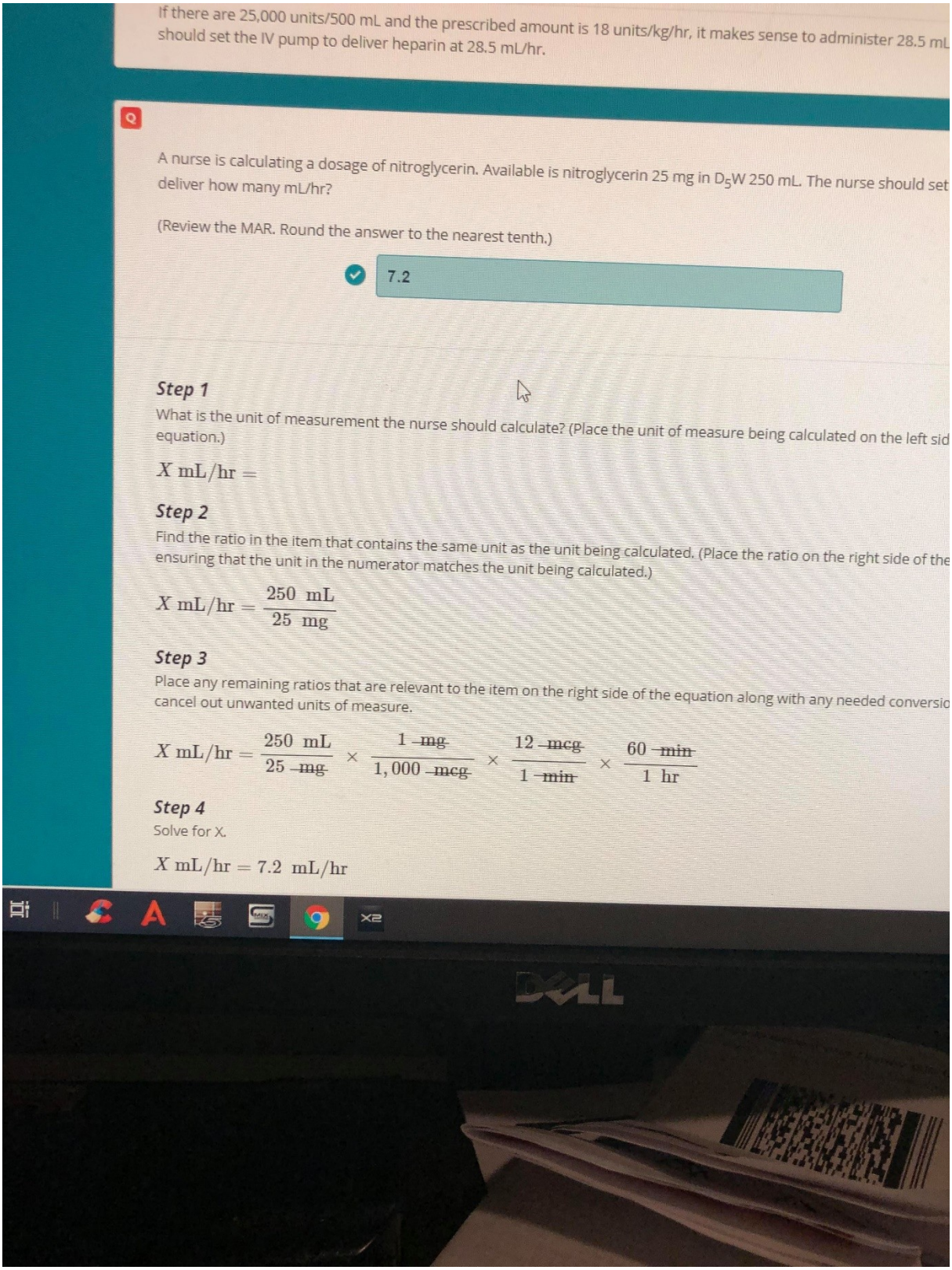

ati
7/10/XX
Aspirin 81 mg PO daily
0800
PRN Medications
7/10/XX
Morphine 1 mg IV bolus every 2 hr PRN pain
7/10/XX
5% dextrose in water 500 mL bolus IV over 2 hr
7/10/XX
0.9% sodium chloride 100 mL/hr by continuous IV infusion
7/10/XX
Heparin 18 units/kg/hr by continuous IV infusion
7/10/XX
Nitroglycerin 12 mcg/min by continuous IV infusion
Titrate per protocol
Signature
Date
A nurse is converting a client's weight from pounds to kilograms. What is the client's weight in kilograms?
(Review the MAR. Round the answer to the nearest tenth.)
79.1
Step 1
What is the unit of measurement the nurse should calculate? (Place the unit of measure being calculated on the left side of the equation.)
X kg =
Step 2
Find the ratio in the item that contains the same unit as the unit being calculated. (Place the ratio on the right side of the equat
ensuring that the unit in the numerator matches the unit being calculated.)
X kg = 1 kg / 2.2 lb
Step 3
Place any remaining ratios that are relevant to the item on the right side of the equation along with any needed conversion fa
cancel out unwanted units of measure.
X kg = 1 kg / 174 lb
DELL


Determine if the equivalent makes sense.
If 1 kg equals 2.2 lb, it makes sense that 174 lb equals 79.1 kg.
A nurse is calculating a dosage of heparin. Available is heparin 25,000 units in 0.9% NaCl 500 mL. The nurse s
to deliver how many mL/hr?
(Review the MAR. Round the answer to the nearest tenth.)
28.5
Step 1
What is the unit of measurement the nurse should calculate? (Place the unit of measure being calculated on the
equation.)
X mL/hr =
Step 2
Find the ratio in the item that contains the same unit as the unit being calculated. (Place the ratio on the right sid
ensuring that the unit in the numerator matches the unit being calculated.)
X mL/hr = 500 mL / 25,000 units
Step 3
Place any remaining ratios that are relevant to the item on the right side of the equation along with any needed co
cancel out unwanted units of measure.
X mL/hr = 500 mL / 25,000 units × 18 units / 1 kg × 1 kg / 2.2 lb × 174 lb / 1 hr
Step 4
Solve for X.
X mL/hr = 28.472727 mL/hr



If there are 25,000 units/500 mL and the prescribed amount is 18 units/kg/hr, it makes sense to administer 28.5 mL should set the IV pump to deliver heparin at 28.5 mL/hr.

A nurse is calculating a dosage of nitroglycerin. Available is nitroglycerin 25 mg in D_5W 250 mL. The nurse should set deliver how many mL/hr?

(Review the MAR. Round the answer to the nearest tenth.)

7.2

Step 1

What is the unit of measurement the nurse should calculate? (Place the unit of measure being calculated on the left sid equation.)

$$X \text{ mL/hr} =$$

Step 2

Find the ratio in the item that contains the same unit as the unit being calculated. (Place the ratio on the right side of the ensuring that the unit in the numerator matches the unit being calculated.)

$$X \text{ mL/hr} = \frac{250 \text{ mL}}{25 \text{ mg}}$$

Step 3

Place any remaining ratios that are relevant to the item on the right side of the equation along with any needed conversio cancel out unwanted units of measure.

$$X \text{ mL/hr} = \frac{250 \text{ mL}}{25 \text{ mg}} \times \frac{1 \text{ mg}}{1,000 \text{ mcg}} \times \frac{12 \text{ mcg}}{1 \text{ min}} \times \frac{60 \text{ min}}{1 \text{ hr}}$$

Step 4

Solve for X.

$$X \text{ mL/hr} = 7.2 \text{ mL/hr}$$

A nurse is preparing to increase the dosage of nitroglycerin by 5 mcg. The nurse should set the IV pump to deliver how m

(Review the MAR. Round the answer to the nearest tenth.)

10.2

Step 1

What is the unit of measurement the nurse should calculate? (Place the unit of measure being calculated on the left side o equation.)

$$X \text{ mL/hr} =$$

Step 2

What is the desired dose?

$$12 \text{ mcg} + 5 \text{ mcg} = 17 \text{ mcg}$$

Step 3

Find the ratio in the item that contains the same unit as the unit being calculated. (Place the ratio on the right side of the equ ensuring that the unit in the numerator matches the unit being calculated.)

$$X \text{ mL/hr} = \frac{250 \text{ mL}}{25 \text{ mg}}$$

Step 4

Place any remaining ratios that are relevant to the item on the right side of the equation along with any needed conversion fa cancel out unwanted units of measure.

$$X \text{ mL/hr} = \frac{250 \text{ mL}}{25 \cancel{\text{mg}}} \times \frac{1 \cancel{\text{mg}}}{1{,}000 \cancel{\text{mcg}}} \times \frac{17 \cancel{\text{mcg}}}{1 \cancel{\text{min}}} \times \frac{60 \cancel{\text{min}}}{1 \text{ hr}}$$

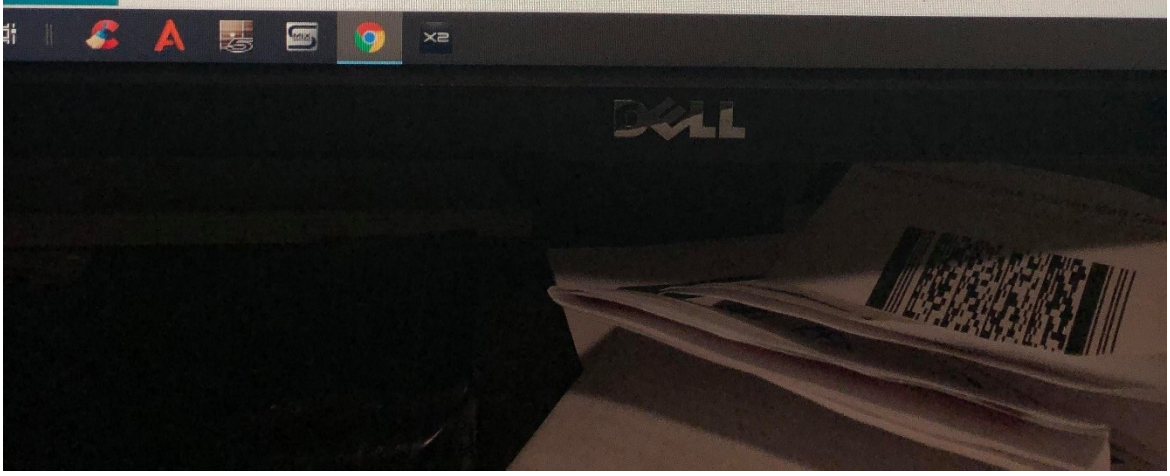
Step 5

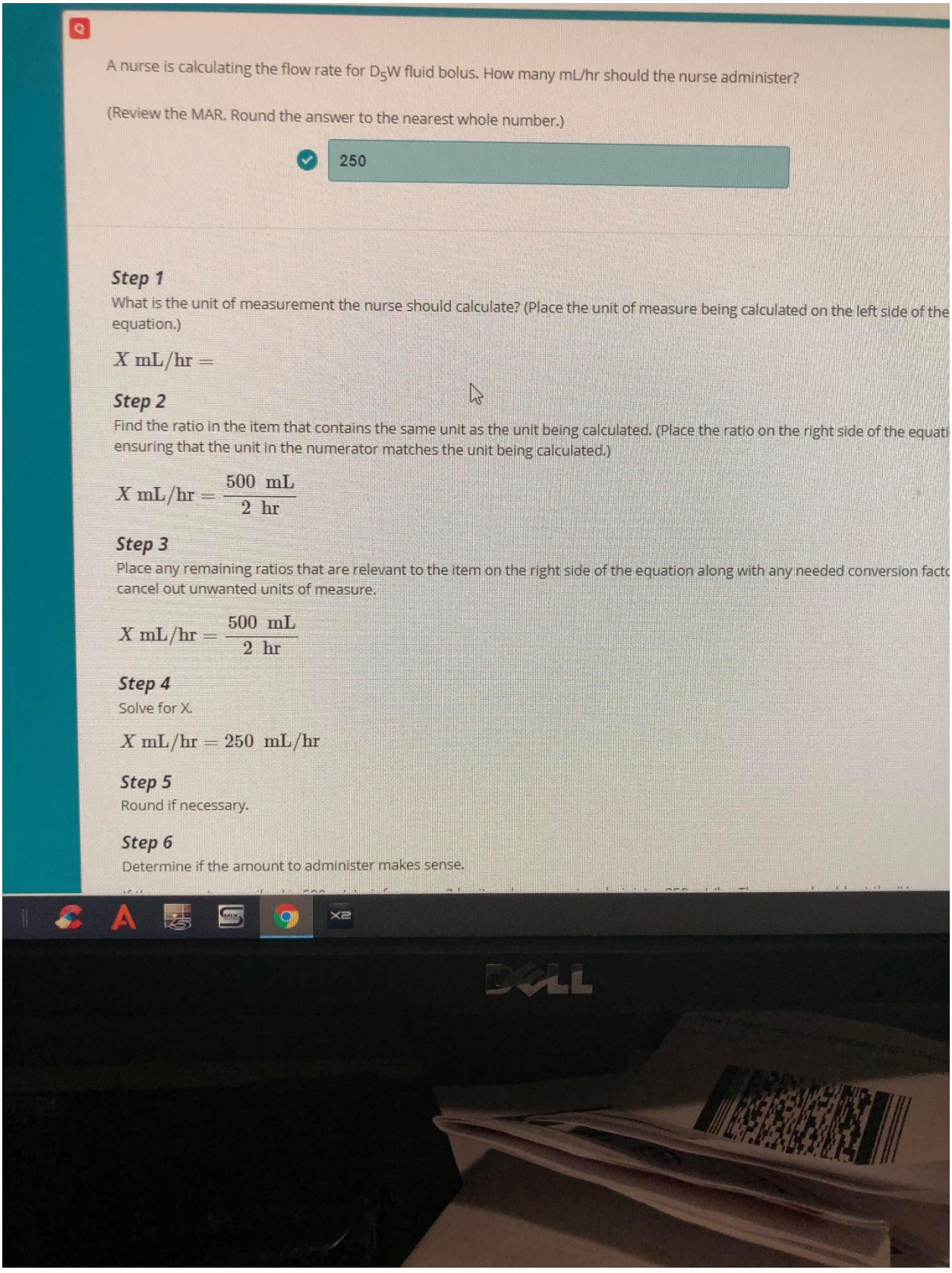
Solve for X.

$$X \text{ mL/hr} = 10.2 \text{ mL/hr}$$

Step 6

Round if necessary.





A nurse is calculating the flow rate for D_5W fluid bolus. How many mL/hr should the nurse administer?

(Review the MAR. Round the answer to the nearest whole number.)

250

Step 1

What is the unit of measurement the nurse should calculate? (Place the unit of measure being calculated on the left side of the equation.)

$$X \text{ mL/hr} =$$

Step 2

Find the ratio in the item that contains the same unit as the unit being calculated. (Place the ratio on the right side of the equati ensuring that the unit in the numerator matches the unit being calculated.)

$$X \text{ mL/hr} = \frac{500 \text{ mL}}{2 \text{ hr}}$$

Step 3

Place any remaining ratios that are relevant to the item on the right side of the equation along with any needed conversion facto cancel out unwanted units of measure.

$$X \text{ mL/hr} = \frac{500 \text{ mL}}{2 \text{ hr}}$$

Step 4

Solve for X.

$$X \text{ mL/hr} = 250 \text{ mL/hr}$$

Step 5

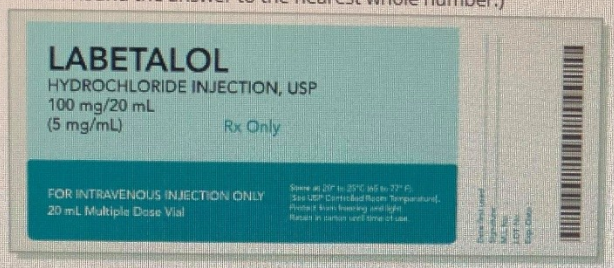
Round if necessary.

Step 6

Determine if the amount to administer makes sense.

A nurse is calculating the dosage of labetalol. How many milliliters should the nurse administer?

(Review the MAR and medication label. Round the answer to the nearest whole number.)



4

Step 1

What is the unit of measurement the nurse should calculate? (Place the unit of measure being calculated on the left side of the equation.)

$$X \text{ mL} =$$

Step 2

Find the ratio in the item that contains the same unit as the unit being calculated. (Place the ratio on the right side of the equatio ensuring that the unit in the numerator matches the unit being calculated.)

$$X \text{ mL} = \frac{1 \text{ mL}}{5 \text{ mg}}$$

Step 3

Place any remaining ratios that are relevant to the item on the right side of the equation along with any needed conversion factor cancel out unwanted units of measure.

$$X \text{ mL} = \frac{1 \text{ mL}}{5 \cancel{\text{mg}}} \times \frac{20 \cancel{\text{mg}}}{1}$$