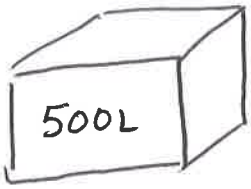
Water Tank

① 

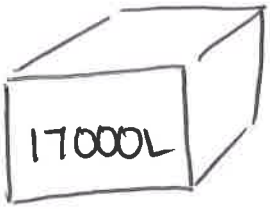
drains 175L / 5mins.

unit rate: $\frac{175\text{L}}{5\text{mins}} \div = 35\text{L/min}$

Since the tank drains at a rate of 35L/min:

$$\frac{500\text{L}}{35\text{L}} \div = 14.2857\ldots \text{mins}$$

It would take ≈14.2857 minutes to drain

② 

1 truck = 3000L = $58.

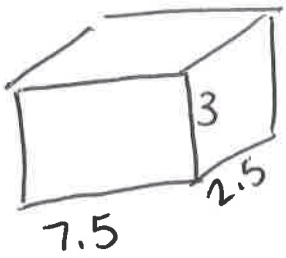
$$\frac{17000\text{L}}{3000\text{L}} = 5.\overline{6} \text{ trips.}$$

You cannot take a partial trip, ∴ 6 trips

6 trips ⊗ $58 = $348

You CAN'T afford to fill the tank.

③



$2(bh_1 + bh_2 + bh_3)$

$2[(7.5 \cdot 2.5) + (2.5 \times 3) + (3 \times 7.5)]$

$2(18.75 + 7.5 + 22.5)$

$2(48.75)$

$97.5\,m^2$

tip: make sure you use all combinations of the dimensions

* You could argue that the bottom does not need to be painted. The total area would be $78.75\,m^2$.

④ $\frac{97.5\,m^2}{15\,m^2} = 6.5$ cans of paint. You must buy 7 cans of paint

↑ represents 1 can of paint

⑤ Answers will vary; however, you NEED to know how to use the formula.