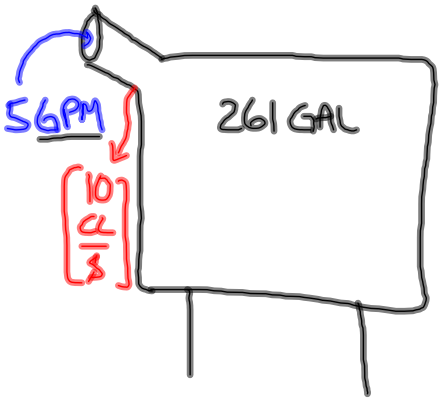


$10cc = 10cm^3$

$$\left[\frac{10(cm)(cm)(cm)}{s}\right]\left[\frac{60s}{MIN}\right]\left(\frac{IN}{2.54\,cm}\right)\left(\frac{IN}{2.54\,cm}\right)\left(\frac{IN}{2.54\,cm}\right)\left(\frac{GAL}{231\,IN^3}\right)$$

$\rightarrow 0.159$ GPM

$231\ IN^3 = 1$ gallon

2.54 cm $= 1$ IN

WHAT'S GOING INTO TANK

$= 5\text{GPM} - 0.159\text{GPM} = 4.841$ GPM

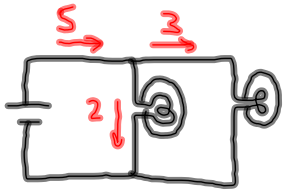
HOW LONG IT TAKES TO FILL TANK

$$\frac{261\text{ GAL}}{4.841\text{ GAL/MIN}} = 53.9\text{ MIN}$$

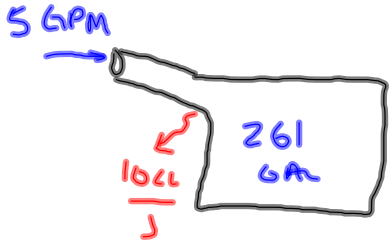
NEXT Q

HOW MUCH LEAKED ON GROUND

$$= \left(53.9\,\text{MIN}\right)\left(.159\,\frac{\text{GAL}}{\text{MIN}}\right) = 8.57\text{ GALLONS}$$



$\left[\frac{231\ IN^3}{GAL}\right] \rightarrow CF \left[\frac{2.54\ cm}{IN}\right]$ $10\ cc = 10\ cm^3$



$\left[\frac{10\ cm^3}{J}\right]\left[\frac{60\ J}{MIN}\right]\left[\frac{IN}{2.54\ cm}\right]^3 \frac{GAL}{231\ IN^3} = \frac{GAL}{MIN}$

$= 0.159\ GPM$

261 GAL TANK

What's going into tank = 5GPM − 0.159GPM =
4.841 GPM

$\frac{261\ GAL}{4.841\ GAL/MIN} = 53.9\ MIN$

So how much leaks ~ found ??

$\left(0.159\ \frac{GAL}{MIN}\right)(53.9\ MIN) \cong 8.6\ GAL$