

Dilution
 moles start = moles end
 $M \times L = M \times L$

Have 12M HCl make 500ml 2M HCl

(12) (ml) = (2) (500ml)

83.33ml 12M HCl

+ 416.67ml H₂O

H ₂ O	+ 500ml H ₂ O
HCl	
H ₂ O	300ml H ₂ O

Do what you oughta add the acid to the water.

425.19 (342.69 - 327.26)

(425.19) (15.43)

6560.6817 = 6561 (4SF)