

How many moles of lithium phosphate are in 90.2 g of this substance?  
Answer in units of mol

$$M(\text{Li}(\text{PO}_4)_3) = 7 + (31 + 64) * 3 = 292 \text{ g/mol}$$

$$v = \frac{m}{M}$$

$$v = \frac{90.2}{292} = 0.31 \text{ mol}$$

0.31 mol