How many moles of oxygen gas react with 6.00 mol of propane C3H8?

Solution:

$$C_3H_8 + 5O_2 = 3CO_2 + 4H_2O$$
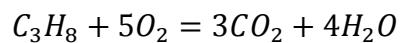
Five moles of oxygen react with one mole of propane. For six moles of propane it is needed:

n(O_2) (moles) = 5*6=30

Answer: 30 moles