Consider the following chemical equation to answer the questions below.

 $C_3H_8 + 5O_2 \rightarrow 3CO_2 + 4H_2O$

- 1. _____ molecules of C_3H_8 react with _____ molecules of O_2 to produce _____ molecules of C_2 and _____ molecules of H_2O .
- 20 molecules of C₃H₈ react with _____molecules of O₂ to produce _____molecules of CO₂ and _____molecules of H₂O.
- 3. 6.022×10^{23} molecules of C₃H₈ react with _____ molecules of O₂ to produce _____ molecules of CO₂ and _____ molecules of H₂O.
- 4. 1 mole of C_3H_8 reacts with _____ moles of O_2 to produce _____moles of CO_2 and ____moles of H_2O .
- 5. 5 moles of C_3H_8 reacts with _____ moles of O_2 to produce _____ moles of CO_2 and _____moles of H_2O .
- 6. 44 g of C_3H_8 reacts with _____ grams of O_2 to produce _____ grams of CO_2 and _____ grams of H_2O .
- 7. 176 g of C_3H_8 reacts with _____ grams of O_2 to produce _____ grams of CO_2 and _____ grams of H_2O .
- 8. How many moles of carbon dioxide can be produced from the reaction of 12 moles of propane?
- 9. What mass of oxygen is needed to produce 65 grams of water?
- 10. How many moles of carbon dioxide can be produced from the reaction of 225 g of propane?
- 11. What mass of H_2O is produced from the reaction of 6.3 g of propane?
- 12. How many molecules of H₂O are produced when 2 moles of O₂ are reacted with excess propane?