**Chem 1013: mini-quiz # 19: reaction balancing and reaction stoichiometry A**

**Your name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**1. Balance this equation**

**­­\_\_ C4H10  + \_\_ O2 🡪 \_\_\_CO + ­\_\_\_\_H2O**

**2. Propane (C3H8) reacts according to the balanced reaction below:**

**C3H8 + 5O2🡪 3CO2 +4H2O**

**Molecular wts 44 32 44 18 g/mol**

**a) How many moles of H2O are formed with 15 moles of CO2 ?**

**\_\_\_\_\_\_\_\_ mol H2O**

**b) How many grams of C3H8 must burn to form 0.4545 mol H2O ?**

**\_\_\_\_\_\_\_ g C3H8**

**Chem 1013: mini-quiz # 19: reaction balancing and reaction stoichiometry B**

**Your name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**1. Balance this equation**

**­­\_\_ C6H14  + \_\_ O2 🡪 \_\_\_CO + ­\_\_\_\_H2O**

**2. Propane (C3H8) reacts according to the balanced reaction below:**

**C3H8 + 5O2🡪 3CO2 +4H2O**

**Molecular wts 44 32 44 18 g/mol**

**a) How many moles of CO2 are formed with 20 moles of H2O ?**

**\_\_\_\_\_\_\_\_ mol CO2**

**b) How many grams of C3H8 must burn to form 0.27272 mol H2O ?**

**\_\_\_\_\_\_\_ g C3H8**