1) 17.5 g of C is reacted with 39.5 g of SO_2 according to the reaction:

$$5C \; + \; 2SO_2 \; \longrightarrow CS_2 \; + \; 4CO$$
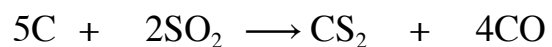
Limiting reactant: _____
Amount by which other
reactant is in excess: _____

What mass of CS_2 is produced?

2) 87.0 g of Cu are reacted with 225 g of HNO_3 according to the reaction:

$$3Cu \; + \; 8HNO_3 \; \longrightarrow 3Cu(NO_3)_2 \; + \; 2NO \; + 4H_2O$$
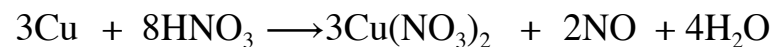
Limiting reactant: _____
Amount by which other
reactant is in excess: _____

What mass of NO is produced?

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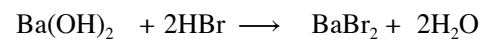3)   50.0 mL of 0.100 M HCl is allowed to react with 30.0 mL of 0.200 M NaOH according to the reaction:

HCl   +   NaOH ⟶   NaCl + H_2O
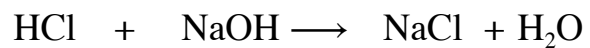
Limiting reactant: _____
Amount by which other
reactant is in excess: _____

4)   0.250 g of $Ba(OH)_2$ is mixed with 15.0 mL of 0.125 M HBr according to the reaction:

$Ba(OH)_2$ + 2HBr ⟶ $BaBr_2$ + $2H_2O$

Limiting reactant: _____
Amount by which other
reactant is in excess: _____
What mass of $BaBr_2$ can be formed?