Balancing Chemical Equations

```
6\alpha = 2\beta + \gamma
                              (C)
12\alpha = 6\beta
                              (H)
 6\alpha = \beta + 2\gamma
                              (O)
```

$\alpha C_6 H_{12}O_6 \rightarrow \beta C_2 H_5 OH + \gamma CO_2$

Ethanol

Glucose

Balancing Chemical Equations

$$\alpha C_6 H_{12} O_6 \rightarrow \beta C_2 H_5 O H + \gamma C O_2$$
 Glucose Ethanol

$$6\alpha = 2\beta + \gamma$$
 (C)
 $12\alpha = 6\beta$ (H)
 $6\alpha = \beta + 2\gamma$ (O)

Balancing Chemical Equations

$$\alpha C_6 H_{12} O_6 \rightarrow \beta C_2 H_5 O H + \gamma C O_2$$
 Glucose Ethanol

$$6\alpha - 2\beta - \gamma = 0$$
 (C)
 $12\alpha - 6\beta = 0$ (H)
 $6\alpha - \beta - 2\gamma = 0$ (O)