Aspirin ($C_9H_8O_4$), can be made in the reaction below:

$C_7H_6O_3 + C_4H_6O_3 \rightarrow C_9H_8O_4 + C_2H_4O_2$ (Formula masses: $C_7H_6O_3 = 138$ $C_4H_6O_3 = 102$ $C_9H_8O_4 = 180$ $C_2H_4O_2 = 60$)
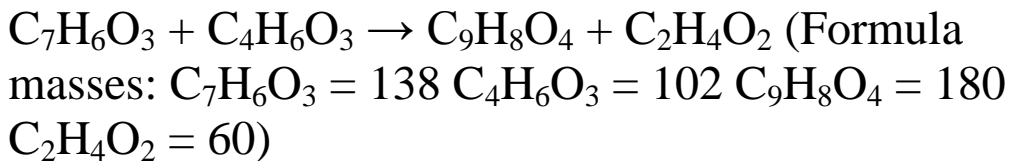
Use the equation below to calculate the atom economy for the production of aspirin:

Atom economy = (mass of required product/total mass of product) x 100%