

$S_1: T_1 = A + B$   
 $S_2: T_1 = T_1 + C$   
 $S_3: T_2 = D * E$   
 $S_4: T_2 = T_2 * F$   
 $S_5: T_1 = T_1 + T_2$   
 $S_6: T_1 = T_1 + G$   
 $S_7: T_1 = T_1 + H$

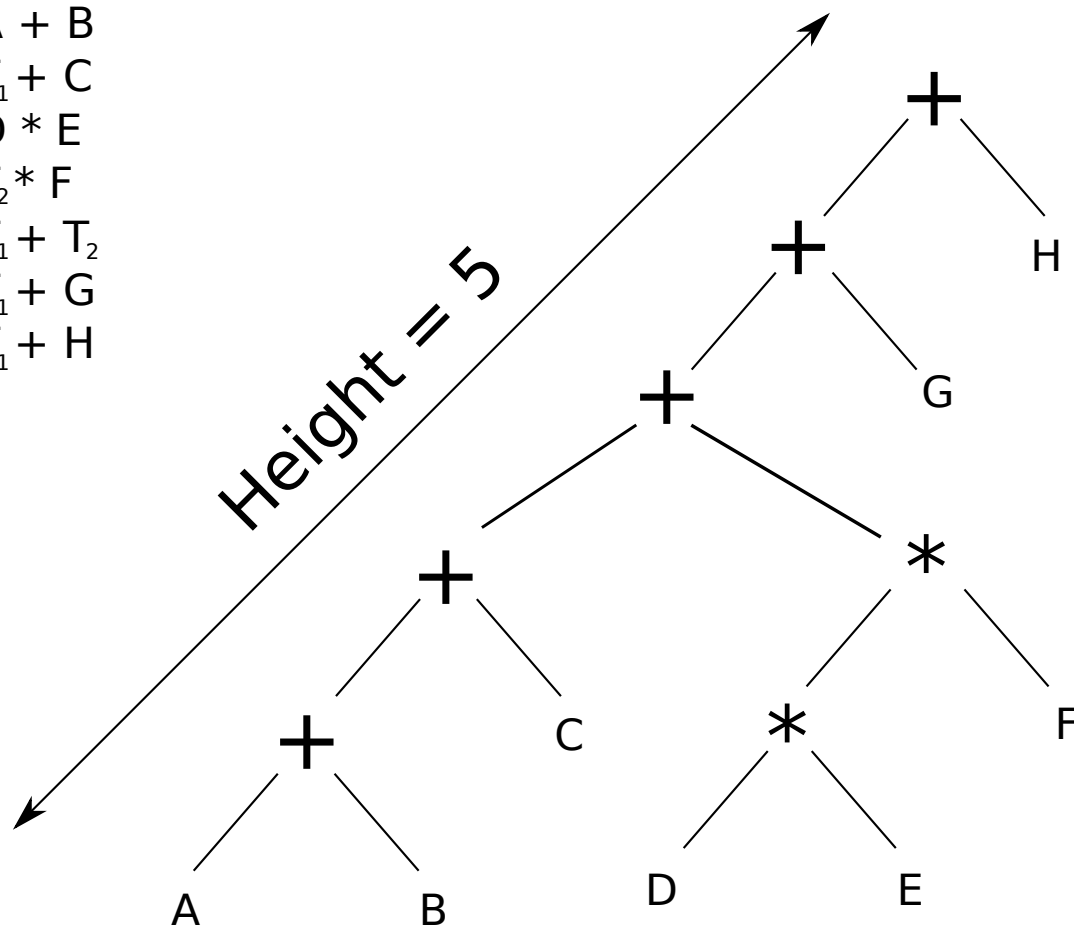


Figure 1-6: In-order tree traversal for evaluation of  $A+B+C+(D*E*F)+G+H$

$S_1: T_1 = A + B$   
 $S_2: T_2 = C + G$   
 $S_3: T_3 = D * E$   
 $S_4: T_1 = T_1 * T_2$   
 $S_5: T_3 = T_3 * F$   
 $S_6: T_1 = T_1 + T_3$   
 $S_7: T_1 = T_1 + H$

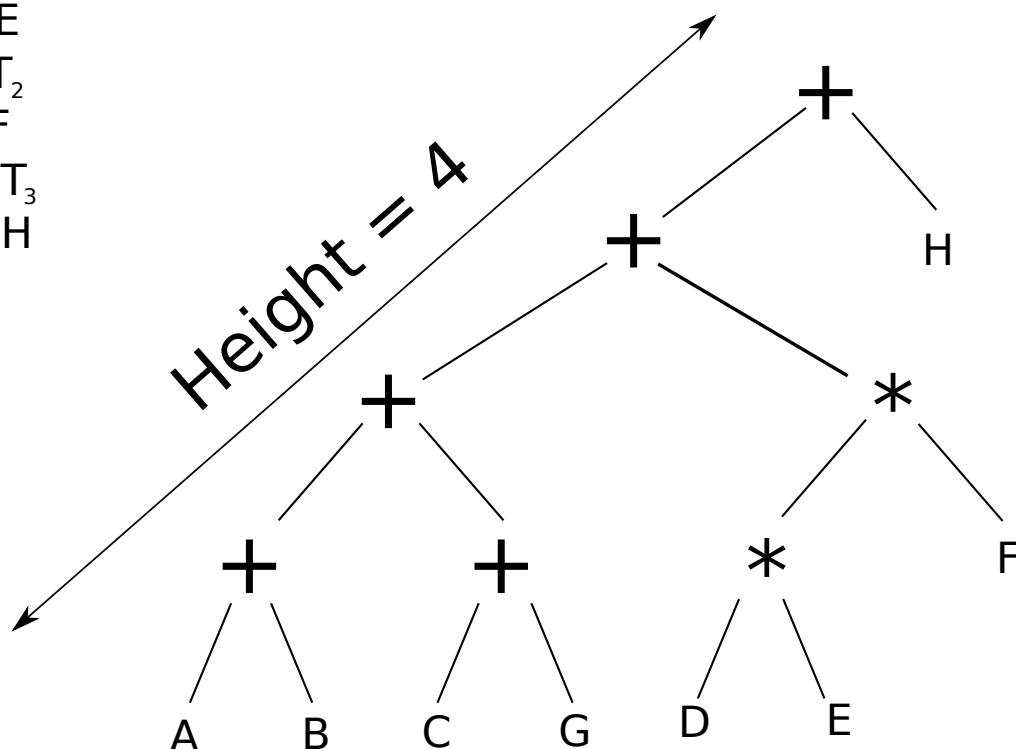


Figure 1-7: Commutativity and Associativity applied to  $A+B+C+(D*E*F)+G+H$