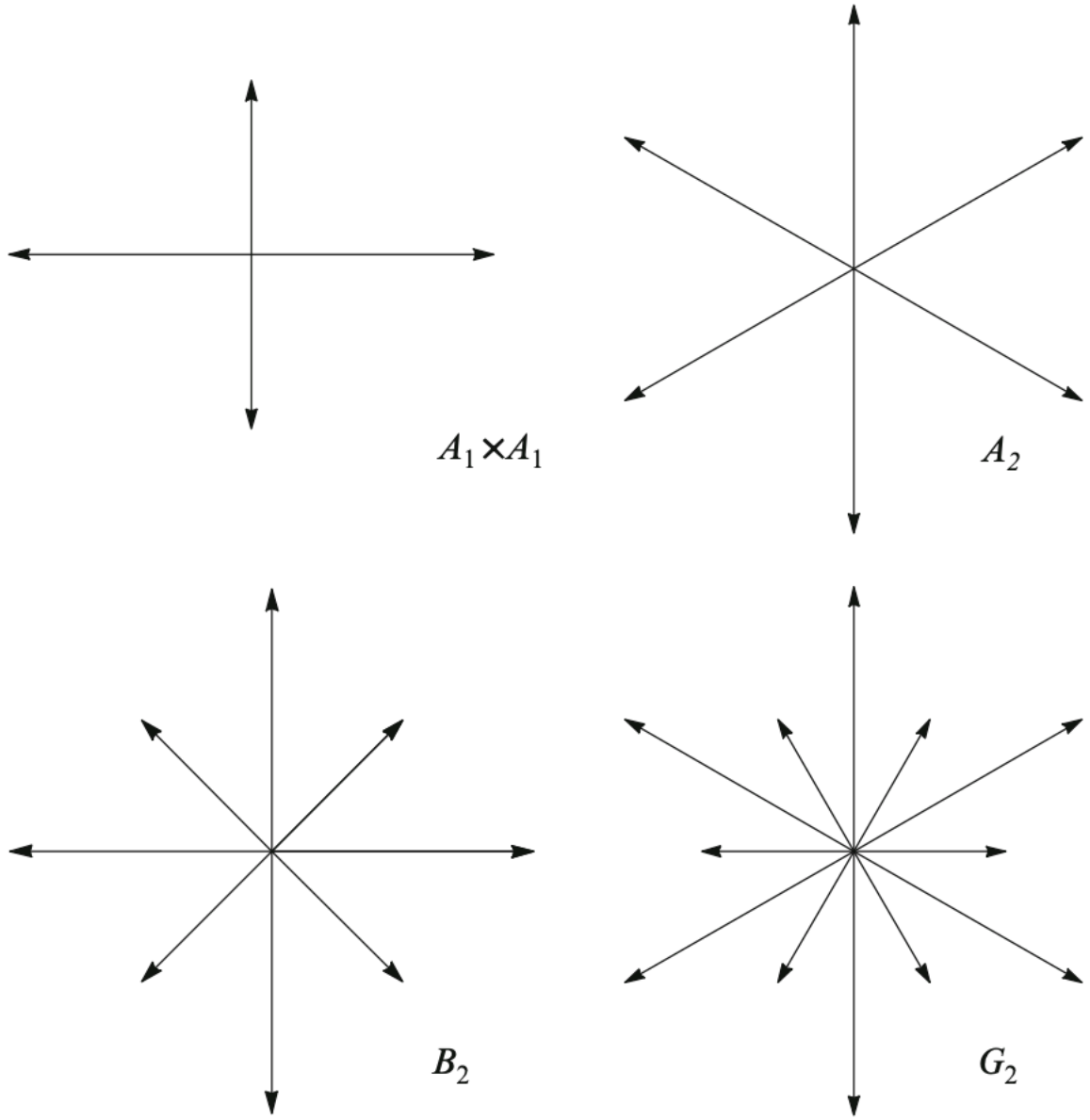


Fig. 8.3 The rank-two root systems

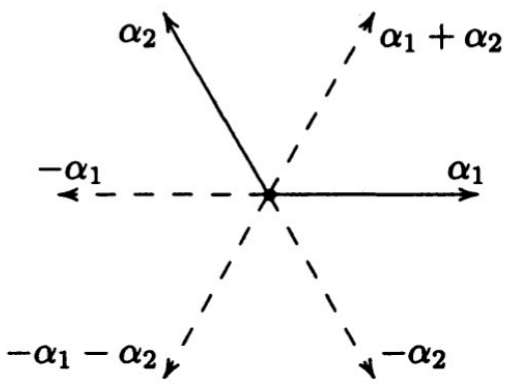


Figure 12.2 The roots of A_2

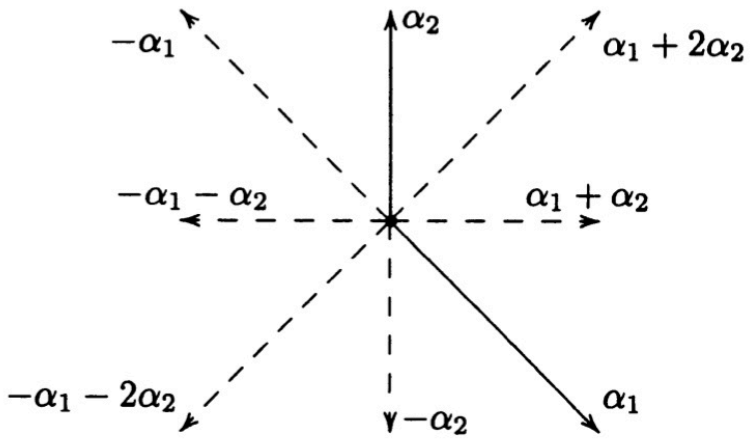


Figure 12.3 The roots of B_2

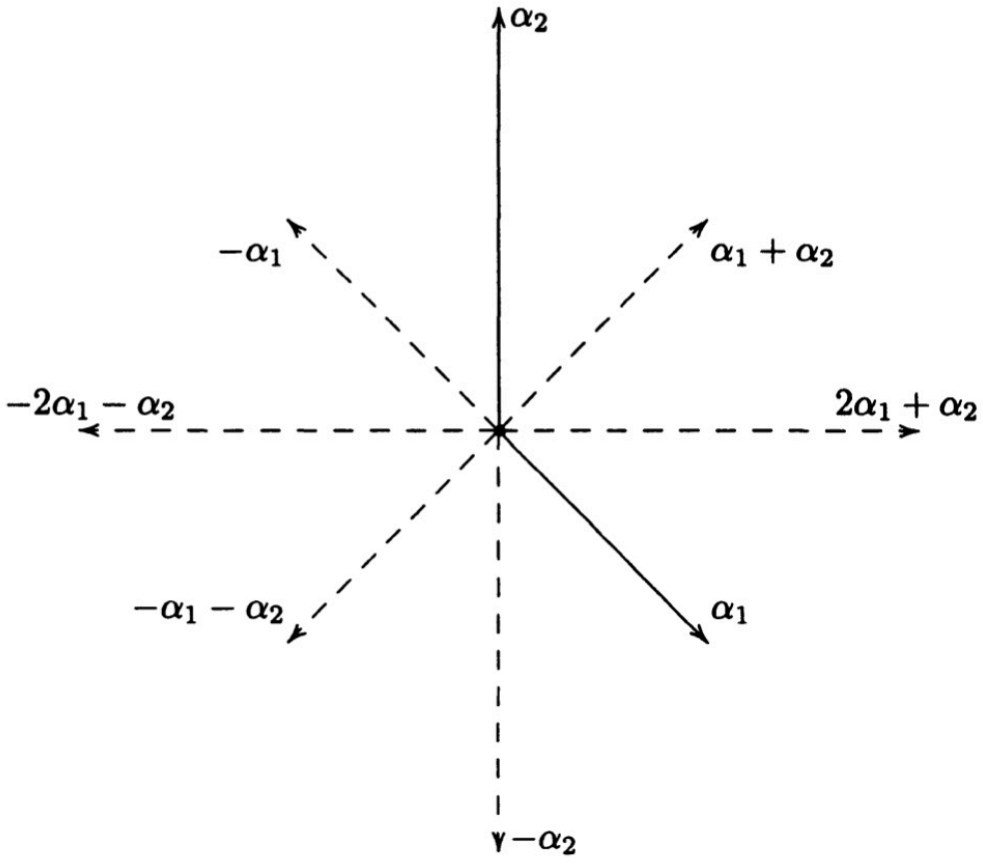


Figure 12.4 The roots of C_2

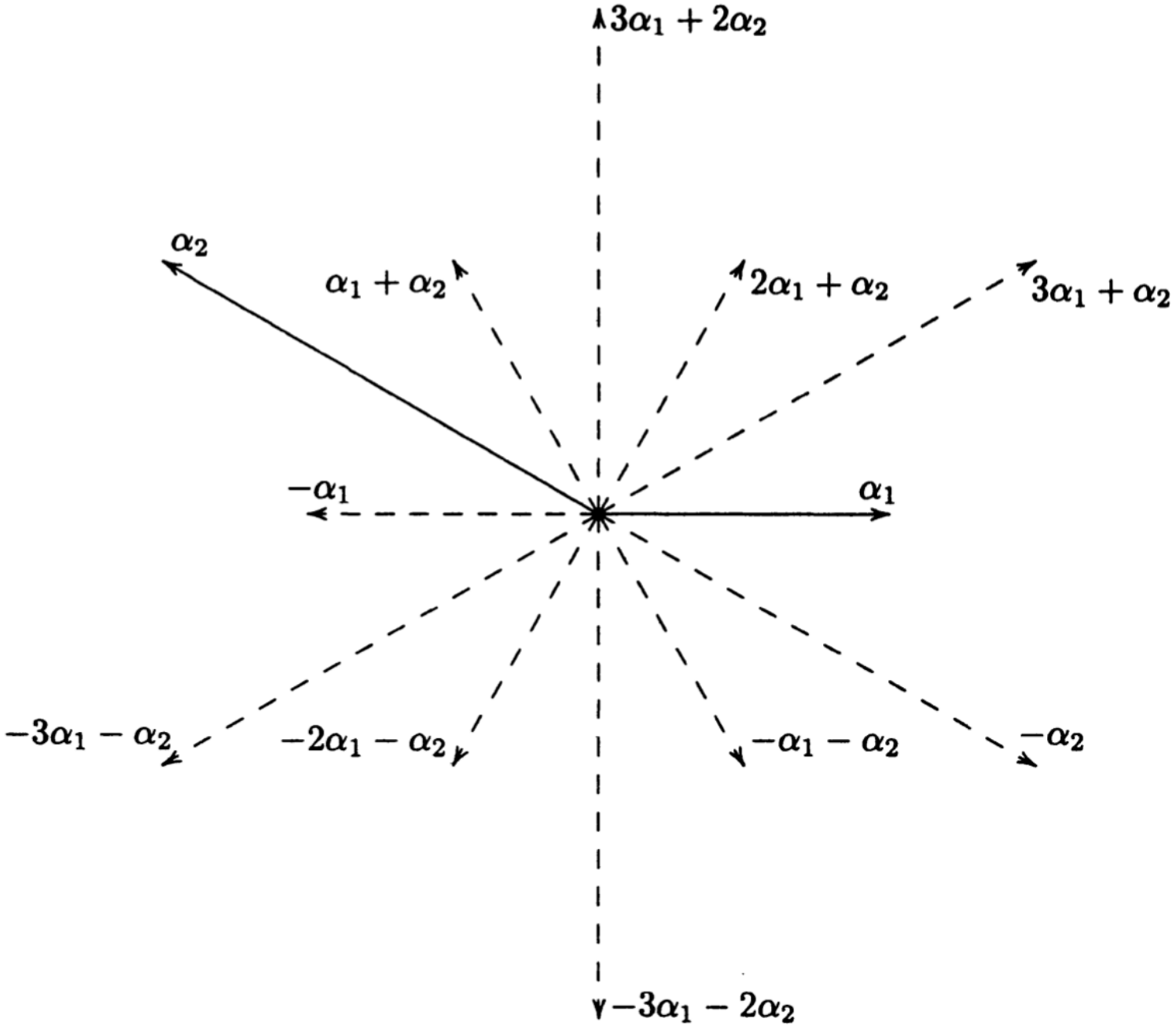


Figure 12.5 The roots of G_2

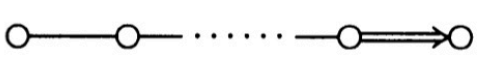
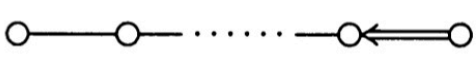
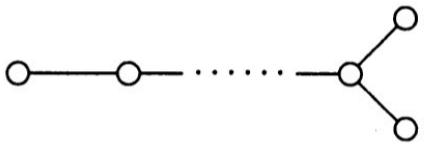
Root system	Matrix group	Dynkin diagram
A_n $(n \geqslant 1)$	$SU(n)$	
B_n $(n \geqslant 2)$	$\mathrm{Spin}(2n+1)$, $SO(2n+1)$	
C_n $(n \geqslant 3)$	$Sp(n)$	
D_n $(n \geqslant 4)$	$\mathrm{Spin}(2n)$, $SO(2n)$	
A_1	$SU(2) \cong \mathrm{Spin}(3)$, $SO(3)$	
$B_2 = C_2$	$Sp(2) \cong \mathrm{Spin}(5)$, $SO(5)$	

Table 12.1 Classical Dynkin diagrams and associated matrix groups

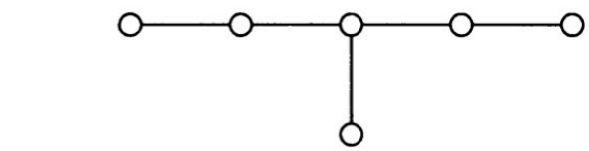
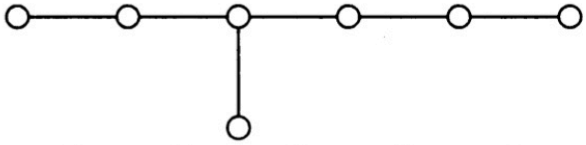
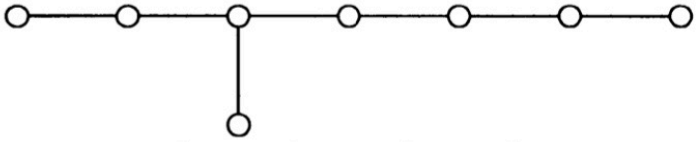
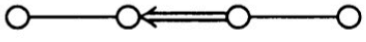
Root system	Dynkin diagram
E_6	
E_7	
E_8	
F_4	
G_2	

Table 12.2 Exceptional Dynkin diagrams