

4.1
3

(k) $C_{15}^2 C_{15}^4 = 143,325$

(r) $C_{14}^1 C_{14}^3 = 5,096$

(c) $\underbrace{C_{15}^2}_{\text{2000}} C_{15}^4 - \underbrace{C_{14}^1 C_{14}^3}_{\text{2000}} = 138,229$