PC Sec 10-1 p. 622 (1-10, 14, 19)

① Permutation ② Combination

③ Combination ④ Permutation

⑤ a) ii b) i

⑥ a) $6C5 = 6$ b) Each group of 5 leaves 1 letter out. The number of groups of 5 equals the number of letters.

⑦ $\binom{28}{4} = 28C4 = 20,475$ ⑧ $34C1 = 34$

⑨ a) $10C3 = 120$ b) $2^{10} = 1024$ c) $\frac{120}{1024} = 0.117$

⑩ a) $150C30$ b) $146C26$ c) $\frac{4C4 \cdot 146C26}{150C30} = 0.0014$

⑭ a) $15C6 = 5005$ b) $15C9 = 5005$

⑰ $55C5 \cdot 42C1 = 146,107,962$