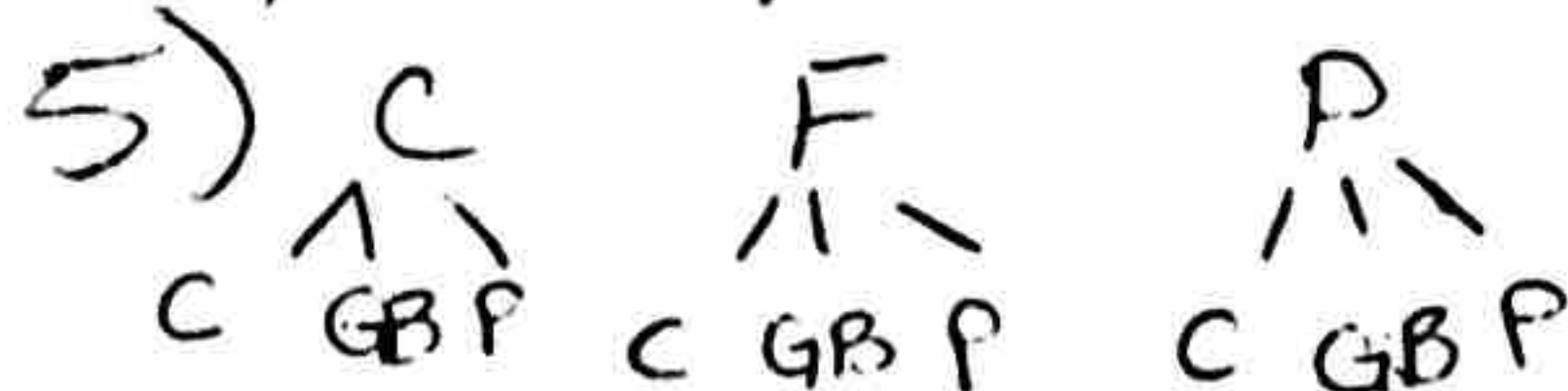
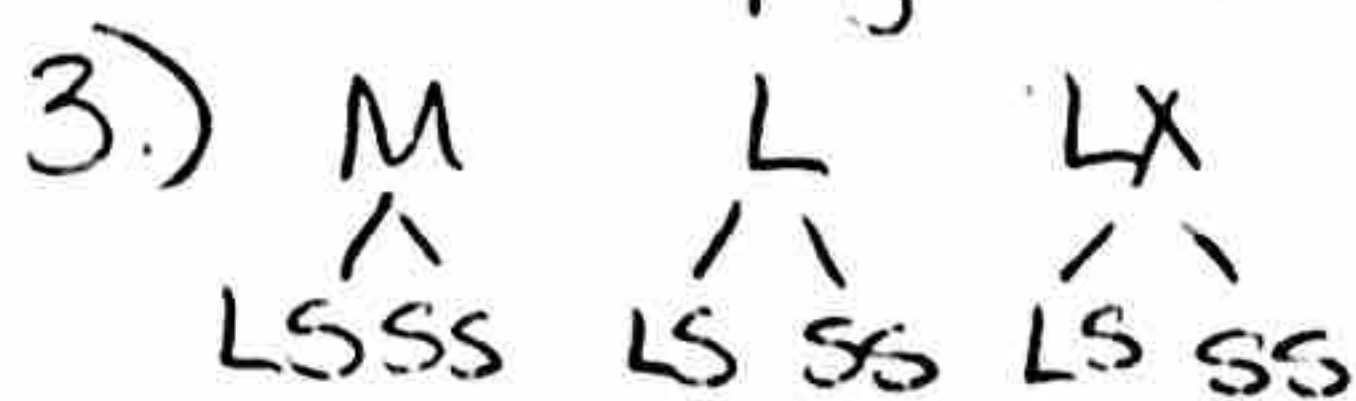


10.1 pg. 686 # 3-55 odd, 63, 66, 70



7.) $2 \cdot 4 = 8$ ways

9.) $4 \cdot 3 \cdot 5 = 60$ ways

11.) a) $26 \cdot 26 \cdot 26 \cdot 26 \cdot 10 \cdot 10 \cdot 10 = 456,976,000$

b) $26 \cdot 25 \cdot 24 \cdot 23 \cdot 10 \cdot 9 \cdot 8 = 258,336,000$

13.) a) $26 \cdot 26 \cdot 26 \cdot 26 \cdot 10 \cdot 10 = 45,697,600$

b) $26 \cdot 25 \cdot 24 \cdot 23 \cdot 10 \cdot 9 = 32,292,000$

15.) a) $10 \cdot 26 \cdot 26 \cdot 26 \cdot 26 \cdot 26 = 118,813,760$

b) $10 \cdot 26 \cdot 25 \cdot 24 \cdot 23 \cdot 22 = 78,936,000$

17.) A

19.) 39,916,800

21.) 40,320

23.) ~~1~~

25.) 720

27.) 72

29.) 630

31.) 30

33.) 40,320

35.) 72

37.) 5040

39.) 3024

41.) 1

43.) $\frac{3!}{2!} = 3$

45.) $\frac{5!}{2!} = 60$

47.) ~~6!~~ $6! = 720$

49.) $\frac{8!}{3!2!} = 3360$

51.) ~~8!~~ $8! = 40,320$

53.) $\frac{9!}{2!2!} = 90,720$

55.) $\frac{6!}{2!2!} = 180$ [B]

$$(63) 52 \cdot 47 \cdot 45 \cdot 36 \cdot 19 \cdot 3 = \boxed{225,678,960}$$

$$(64) 15! = 1,307,674,368,000$$

$$(65) 9 \cdot 8 \cdot 7 = \boxed{504}$$

$$(66) \frac{8!}{3!2!3!} = \boxed{560}$$

$$(70) \frac{3!}{1!} = \boxed{6 \text{ ways}}$$