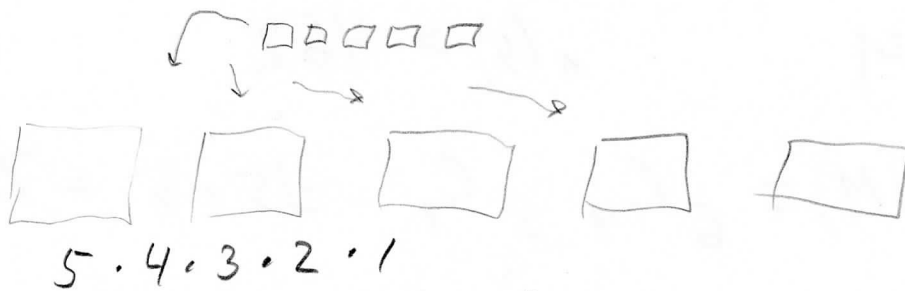


41]



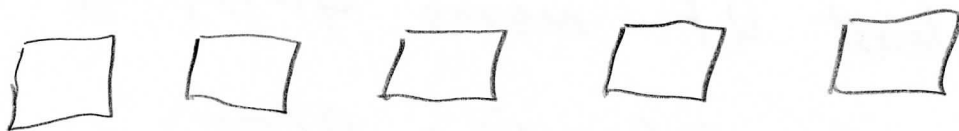
$$n(E) = n(\text{correct}) = 1$$

There is only one correct order

$$n(S) = 5 \cdot 4 \cdot 3 \cdot 2 \cdot 1 = 120$$

$$P(E) = \frac{n(E)}{n(S)} = \frac{1}{120}$$

93] 6 F and 5 M for 5 positions



$$A) P(3F2M) = \frac{n(3F2M)}{n(S)}$$

• order does not matter, i.e. combination

$$n(S) = {}_{11}C_5 \quad 11 \text{ people for 5 positions}$$

$$= 462$$

$$n(3F2M) = {}_6C_3 \cdot {}_5C_2 = 20 \cdot 10 = 200$$

$$P(3F2M) = \frac{200}{462} = 0.4329$$

6 F for 3 positions • 5 M for 2 positions

93] cont.

B)

4F1M

$$n(s) = 462$$

$$n(4F1M) = {}_6C_4 {}_5C_1 = 15 \cdot 5 = 75$$

$$P(4F1M) = \frac{75}{462} = 0.1623$$

C) 5F

$$n(s) = 462$$

$$n(5F) = {}_6C_5 = 6$$

$$P(5F) = \frac{6}{462} = 0.0130$$

D) At least 4F means 4F1M or 5F

$$P(F \geq 4) = P(4F1M) + P(5F)$$

$$= .1623 + .0130$$

$$= 0.1753$$