

TUES 4-15-08

P.56 MORE EXAMPLES

18) a) ORDER IMPORTANT? NO

$$C(30,5) = {}_{30}C_5 = \binom{30}{5}$$

$$= \frac{30!}{25! \cdot 5!}$$

$$= \underline{\underline{142,506}}$$

b) ORDER

IS

IMPORTANT!

YES

$$P(30,5) = {}_{30}P_5$$

$$= \frac{30!}{(30-5)!}$$

$$= \underline{\underline{17,100,720}}$$

$$\underline{30} \cdot \underline{29} \cdot \underline{28} \cdot \underline{27} \cdot \underline{26}$$

(20) TOOL? F.C.P.

$$\underline{6} \cdot \underline{4} \cdot \underline{2} = \underline{\underline{48 \text{ WAYS}}}$$

(24) a) ALL CLUBS ; 5 CARDS

TOOL? C

~~C(52, 5)~~

$$C(13, 5)$$

b) ALL CLUBS BUT NO KINGS:

$$C(12, 5) = \underline{\underline{792}}$$

$$= \frac{13!}{8! 5!}$$

$$= \underline{\underline{1287}}$$

②6) 2 CLUBS & 3 HEARTS?

$$\frac{C(13,2)}{\text{CLUBS}} \cdot \frac{C(13,3)}{\text{HEARTS}} = \underline{\underline{22,308}}$$

F.C.P. & C

③ a) NO REPEATS?

$$P(10, 5) = 30,240$$

$$\underline{10} \cdot \underline{9} \cdot \underline{8} \cdot \underline{7} \cdot \underline{6} \nearrow$$

b) CAN REPEAT

$$\underline{10} \cdot \underline{10} \cdot \underline{10} \cdot \underline{10} \cdot \underline{10}$$

$$= \underline{\underline{100,000}}$$

(34) 7 SR; 5 JR

a) ANY 4?

$$C(12, 4) = \underline{\underline{495}}$$

b) 4 SR OFF?

$$C(7, 4) = \underline{\underline{35}}$$

c) 3 SR, 1 JR?

$$C(7, 3) \cdot C(5, 1)$$

$$= \underline{\underline{175}} \checkmark$$

d) 2 SR, 2 JR?

$$C(7, 2) \cdot C(5, 2)$$

$$= \underline{\underline{210}}$$

(40)

1 2 3 4 47

ORDER IS NOT IMPORTANT!

$${}_{47}C_6 = \underline{\underline{10,737,573}}$$

3.4 YRS TO PLAY ALL COMBINATIONS.

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① a) 336 b) 56 c) 56

③ a) 45 b) 90 c) 45

⑤ a) 840 b) 35 c) 35

⑦, ⑨ REASSIGNED ⑩, ⑫ REASSIGNED

⑪ a) 1 b) 5 c) 10 d) 10 e) 5 f) 1

⑧, ④ IN GROUPS

⑬ a) 36 b) 36 c) 120 d) 120

⑥, ⑧ IN GROUPS

⑮ a) $P(20, 4) = 116,280$

b) $C(20, 4) = 4845$

O.T.L.

* CORRECT TODAY'S O.T.L.

P.56 17-41 (000)

7, 9, 10, 16

RE-ASSIGNED