

Probability 1

chapter

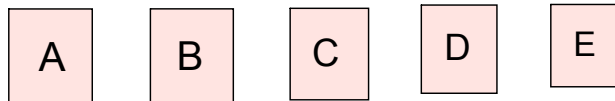
1

Section 1.2 Combinations

Groups?

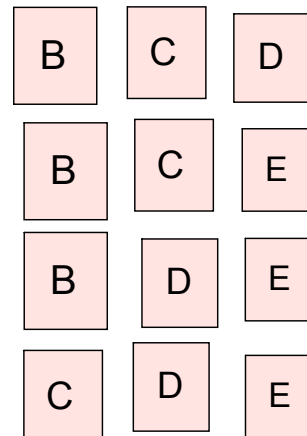
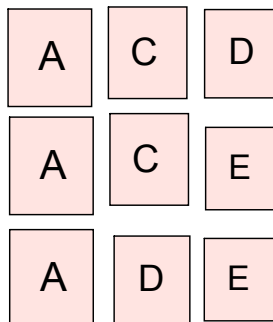
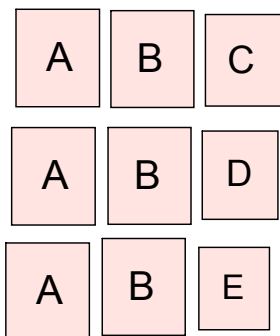
PROJECT MATHS
Text & Tests 5
 LEAVING CERTIFICATE
 HIGHER LEVEL
 STRAND 1
 PROBABILITY & STATISTICS

8

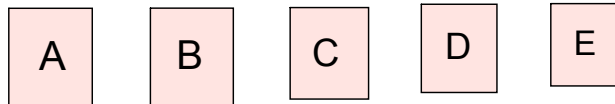


${}^5C_3 = 10$

Committees of 3, how many?



10



$${}^5C_3 = 10$$

Committees of 3, how many?

$$= \frac{5 \times 4 \times 3}{3 \times 2 \times 1}$$

$$= 10$$

A B C
 B C A
 C B A
 C A B
 B A C
 A C B

Same
 $6 = 3 \times 2 \times 1$
 $= 3!$

14 in class pick 5 for
Committee. How many committees
possible?

$$\text{no. committees} = {}^{14}C_5$$

$$= \frac{14 \times 13 \times 12 \times 11 \times 10}{5 \times 4 \times 3 \times 2 \times 1}$$

$$= 2002 \quad \checkmark$$

$${}^n C_r = \frac{n!}{r! (n-r)!}$$