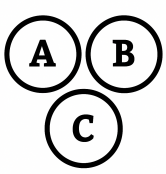
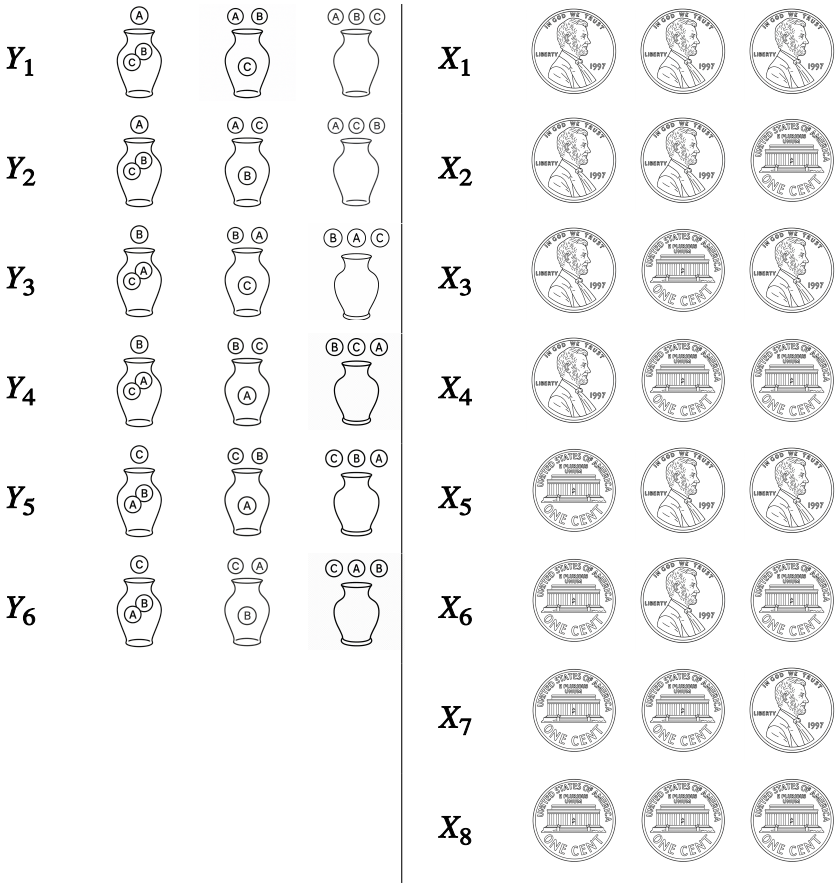
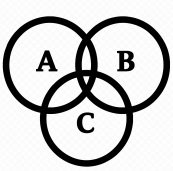
Permutations







$$N = \{A, B, C\}$$

$$|Y| = {}_{\ni}rP_k = \frac{r!}{(r-k)!}$$

|Y| = |N| x (|N|-1) x (|N|-2)

|Y| = 3 x 2 x 1 = 6

$$M = \{T, H\}$$

$$|X| = {}_{\ni}|M|^3$$

|X| = |M| x |M| x |M|

|X| = 2 x 2 x 2 = 8

?

$$N = \{1, 2, 3, 4, 5\}$$

$X = {}_{\ni}$**(N,4)**

|X| = ?

E Permutations E

$N = \{1, 2, 3, ...26\}$

$X =$ ⩷**(N,4)**

$|X| = rPk = |N|!/(|N| - 4)!$

$|X| = |N|x(|N| - 1)x(|N| - 2)x(|N| - 3)$

$|X| = 5x4x3x2 = 120$