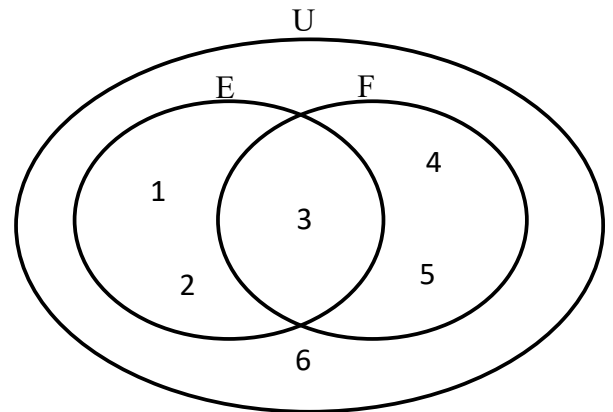


## Énoncés

## Exercice 1

On considère les trois ensembles  $U$ ,  $E$  et  $F$  ci-contre.



1. Compléter :

$$F = \dots$$

$$E \cap F = \dots$$

$$E \cup F = \dots$$

$$C_U E = \dots$$

2. Compléter avec les symboles appropriés.

$$1 \dots E$$

$$6 \dots E \cup F$$

$$\{1; 3; 5\} \dots E \cap F$$

$$\emptyset \dots U$$

$$\{3; 4\} \dots F$$

$$4 \dots C_U E$$

## Exercice 2

Exprimer les ensembles suivants uniquement en fonction des ensembles  $A$ ,  $B$  et  $C$ .

a]  $\{3; 4\}$

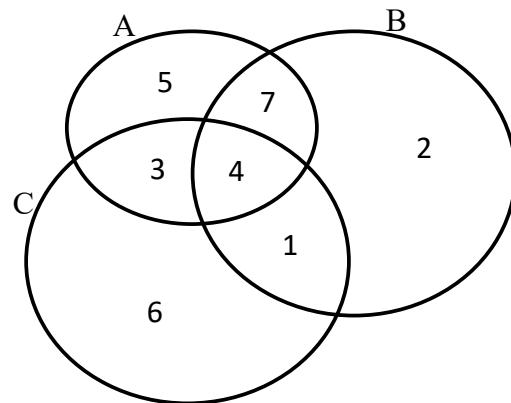
b]  $\{4\}$

c]  $\{1; 2; 3; 4; 5; 6; 7\}$

d]  $\{1; 3; 4; 5; 7\}$

e]  $\{2; 7\}$

f]  $\{1; 4; 7\}$



## Corrigés

## Exercice 1

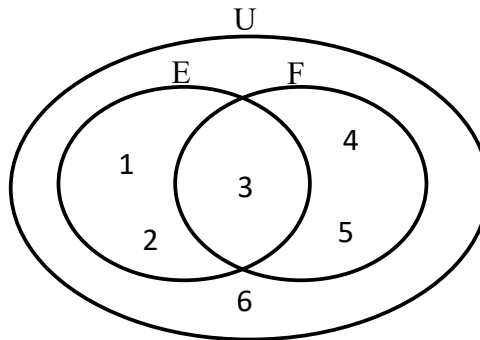
1.

$$F = \{3; 4; 5\}$$

$$E \cap F = \{3\}$$

$$E \cup F = \{1; 2; 3; 4; 5\}$$

$$\complement_U E = \{6\}$$



2.

$$1 \in E$$

$$6 \notin E \cup F$$

$$\{1; 3; 5\} \not\subset E \cap F$$

$$\emptyset \subset U$$

$$\{3; 4\} \subset F$$

$$4 \in \complement_U E$$

## Exercice 2

a]  $\{3; 4\} = A \cap C$

b]  $\{4\} = A \cap B \cap C$

c]  $\{1; 2; 3; 4; 5; 6; 7\} = A \cup B \cup C$

d]  $\{1; 3; 4; 5; 7\} = A \cup (B \cap C)$

e]  $\{2; 7\} = \complement_B (B \cap C)$

f]  $\{1; 4; 7\} = B \cap (A \cup C)$

