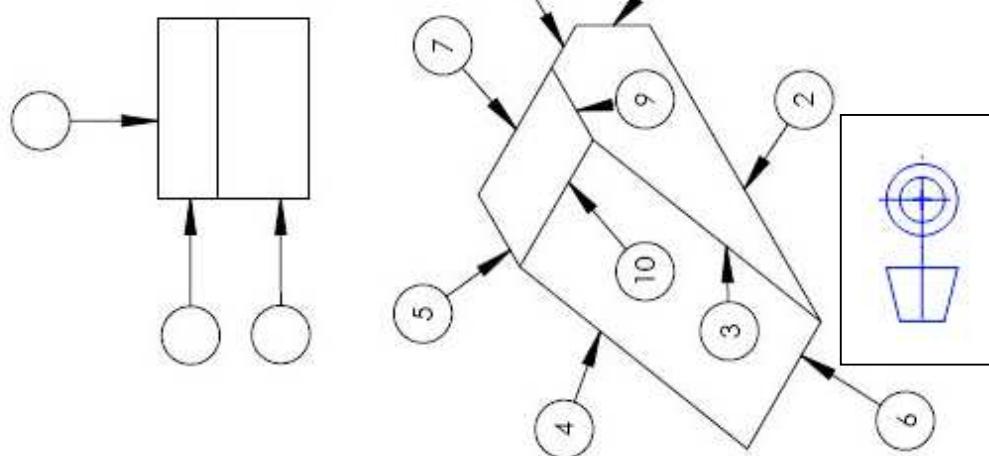
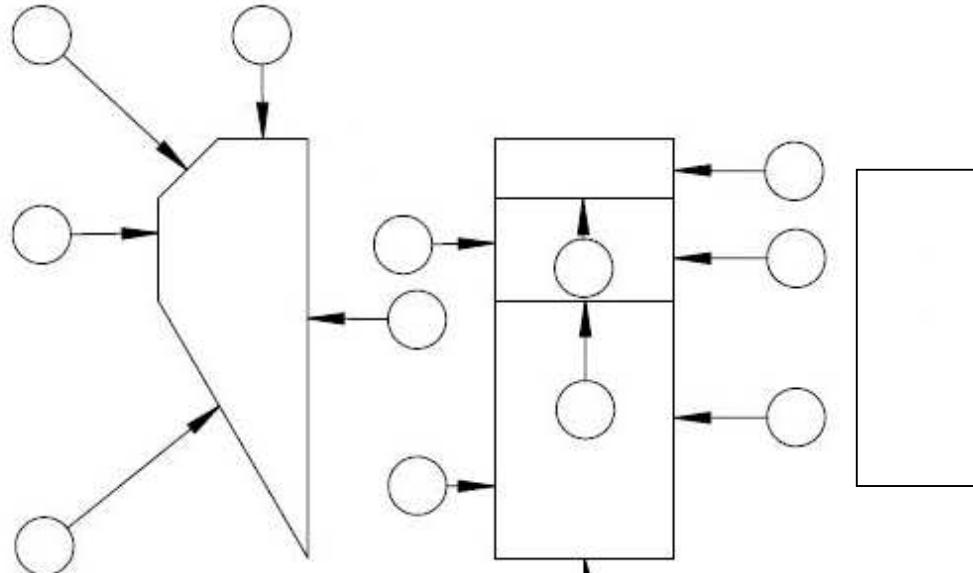
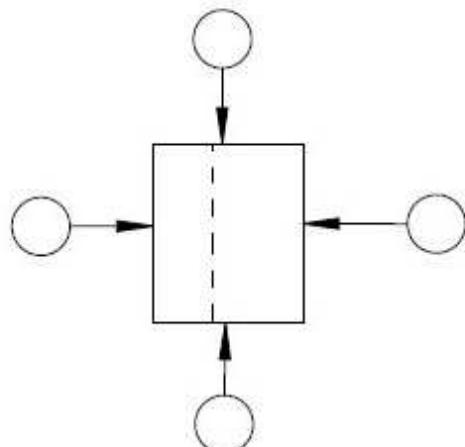
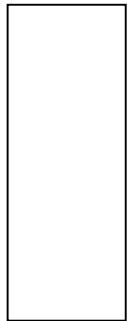


Bases du Dessin industriel

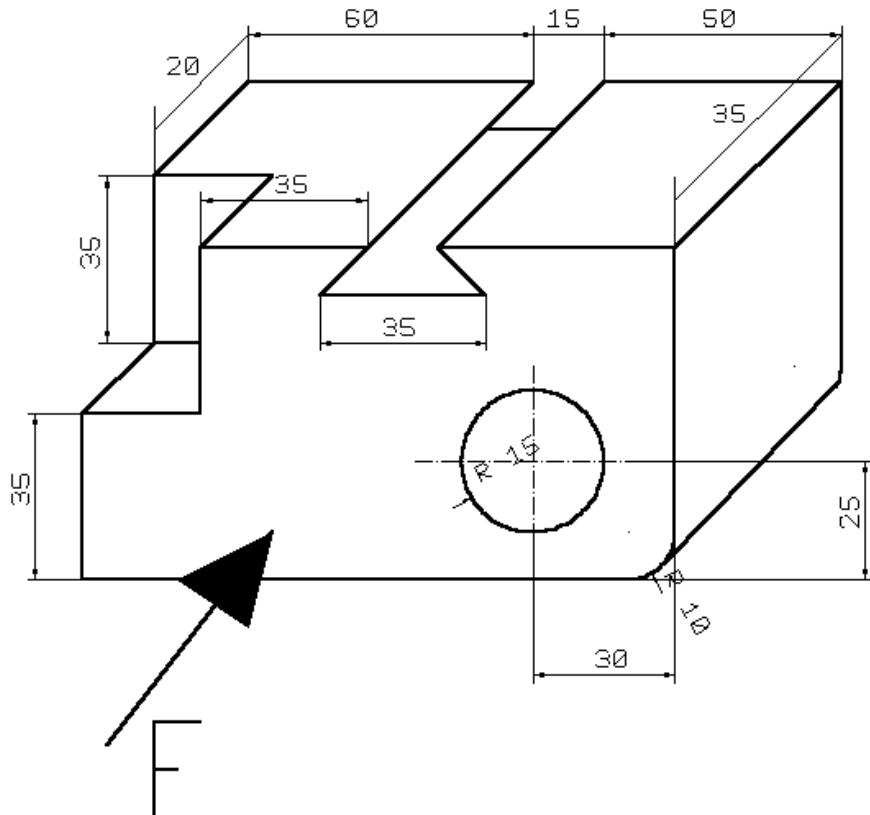
I) Exercice 1

Retrouver le numéro des arêtes et nommer les vues



II) Exercice 2

Soit la pièce suivante :



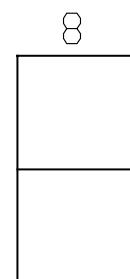
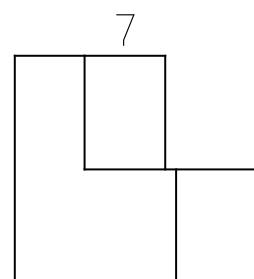
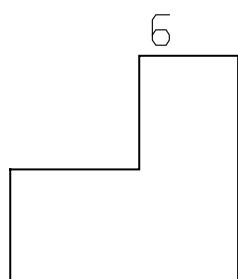
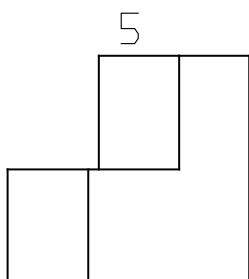
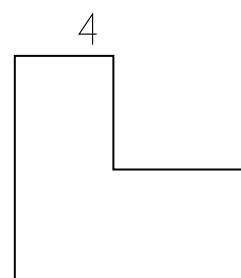
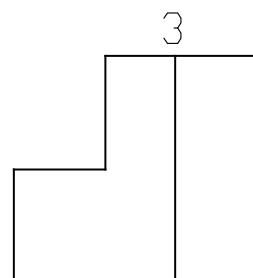
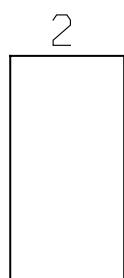
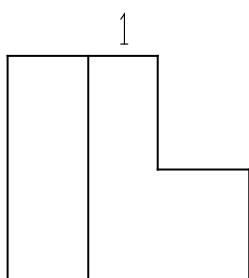
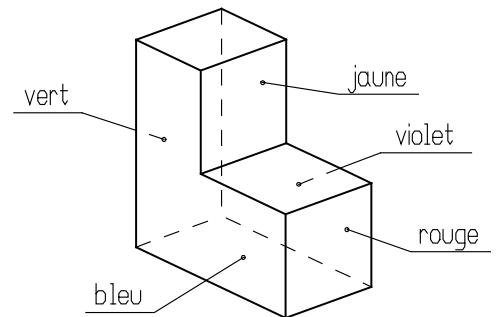
1) Donner les dimensions du volume enveloppe

Déterminer les dimensions des cadres enveloppe

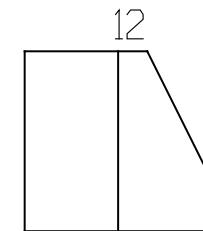
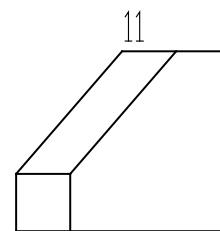
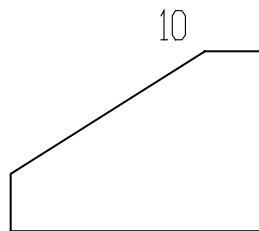
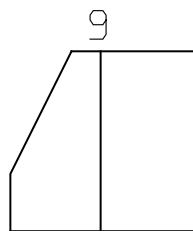
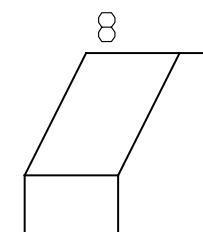
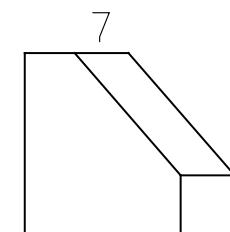
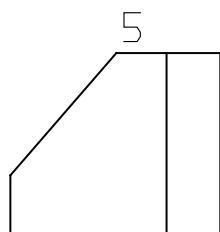
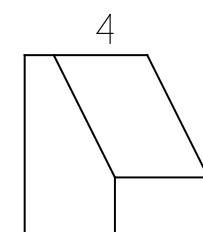
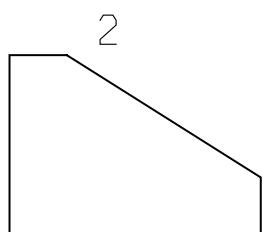
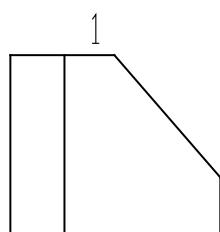
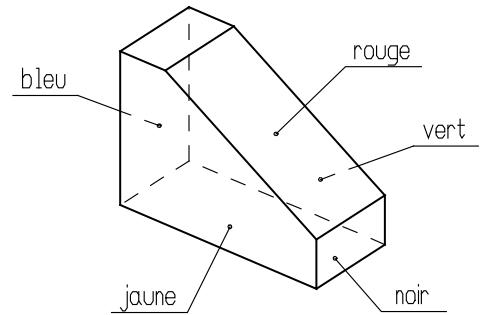
3) Déterminer les espacements horizontaux et verticaux entre les vues.

III) Exercice 3

Soit la cale entaillée dessinée ci-contre, en perspective et suivant 8 vues
Coloriez la perspective et les 8 vues en respectant les couleurs indiquées.



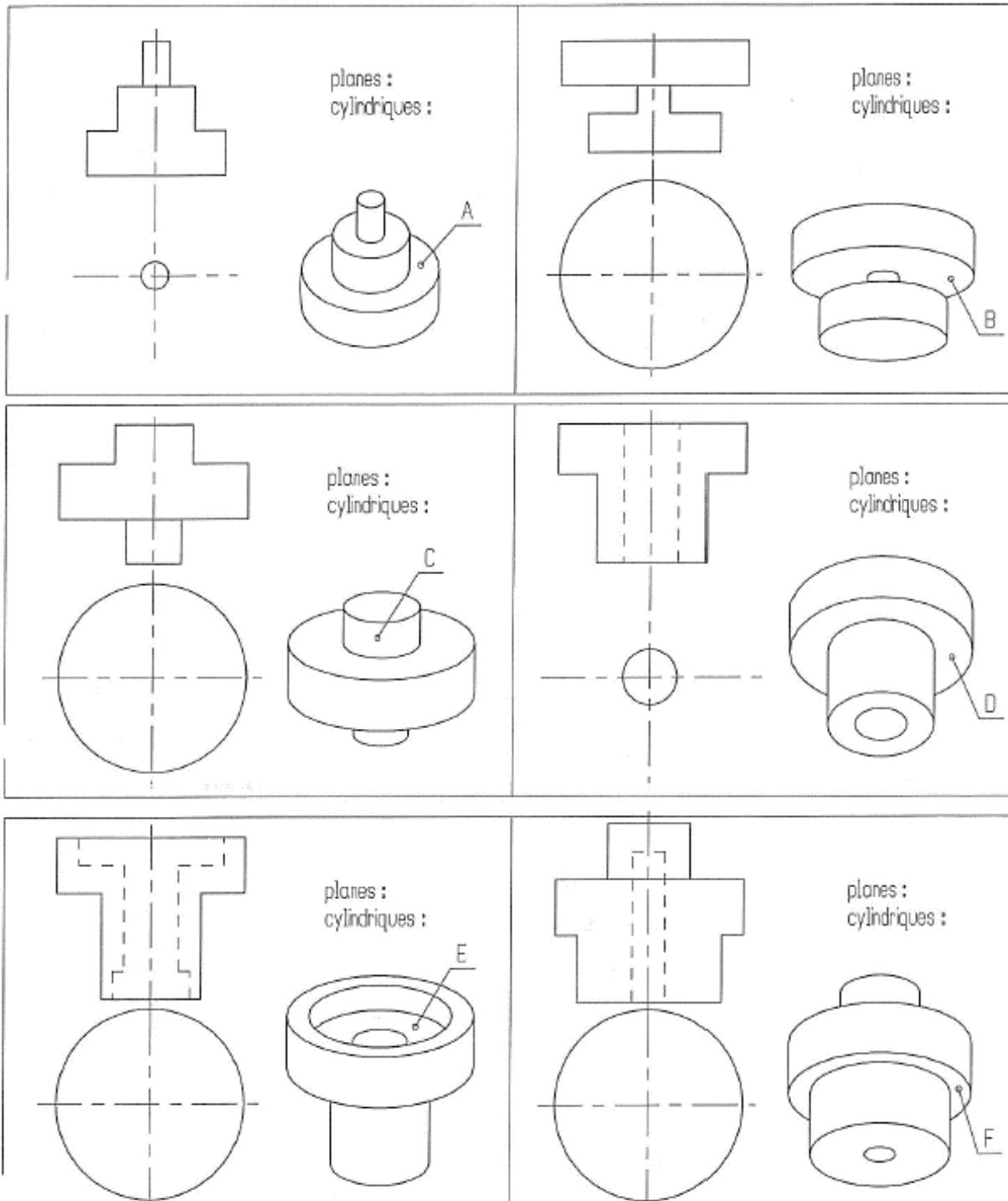
Soit la cale dessinée ci-contre en perspective et suivant 12
Coloriez la perspective et les 12 vues en respectant les couleurs indiquées.



IV) Exercice 4**Exercice****SURFACE CYLINDRIQUE N°1**

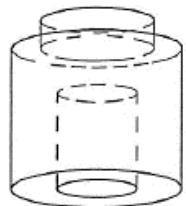
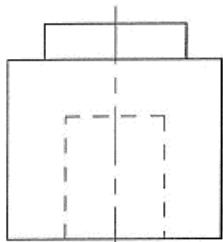
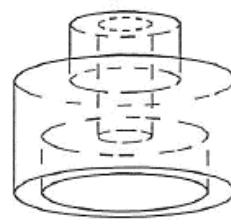
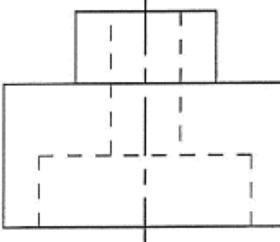
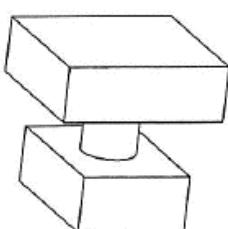
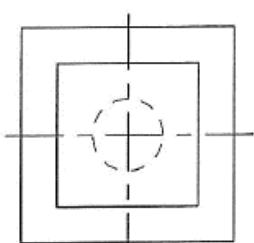
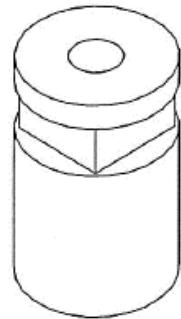
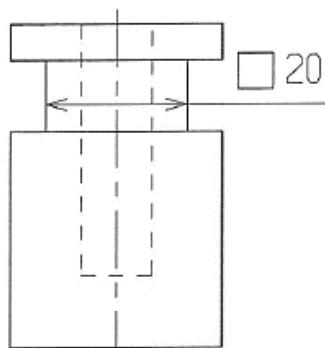
Soit les 6 pièces ci-dessous entièrement cylindriques.

1. Complétez les 6 vues de faces (il manque 1 ou plusieurs segments, en traits forts ou pointillés)
2. Dessinez les vues de dessus (cercles en traits forts ou pointillés)
3. Colorez de la couleur que vous avez, les surfaces A, B, C, D, E et F dans les 2 vues



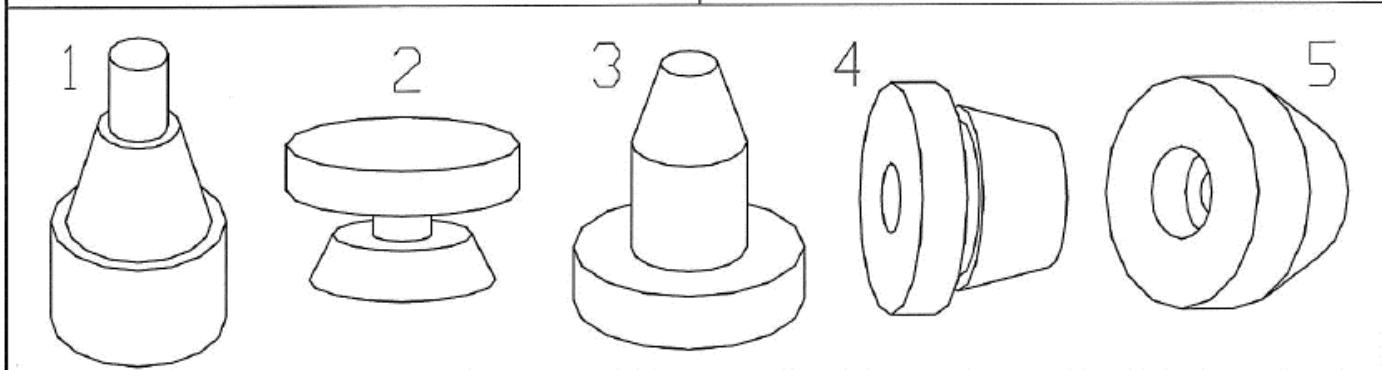
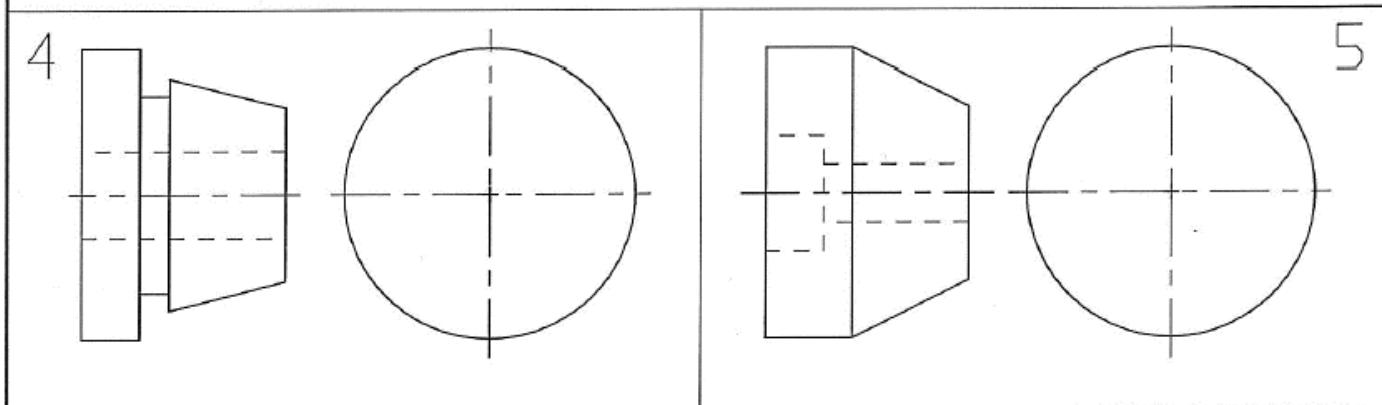
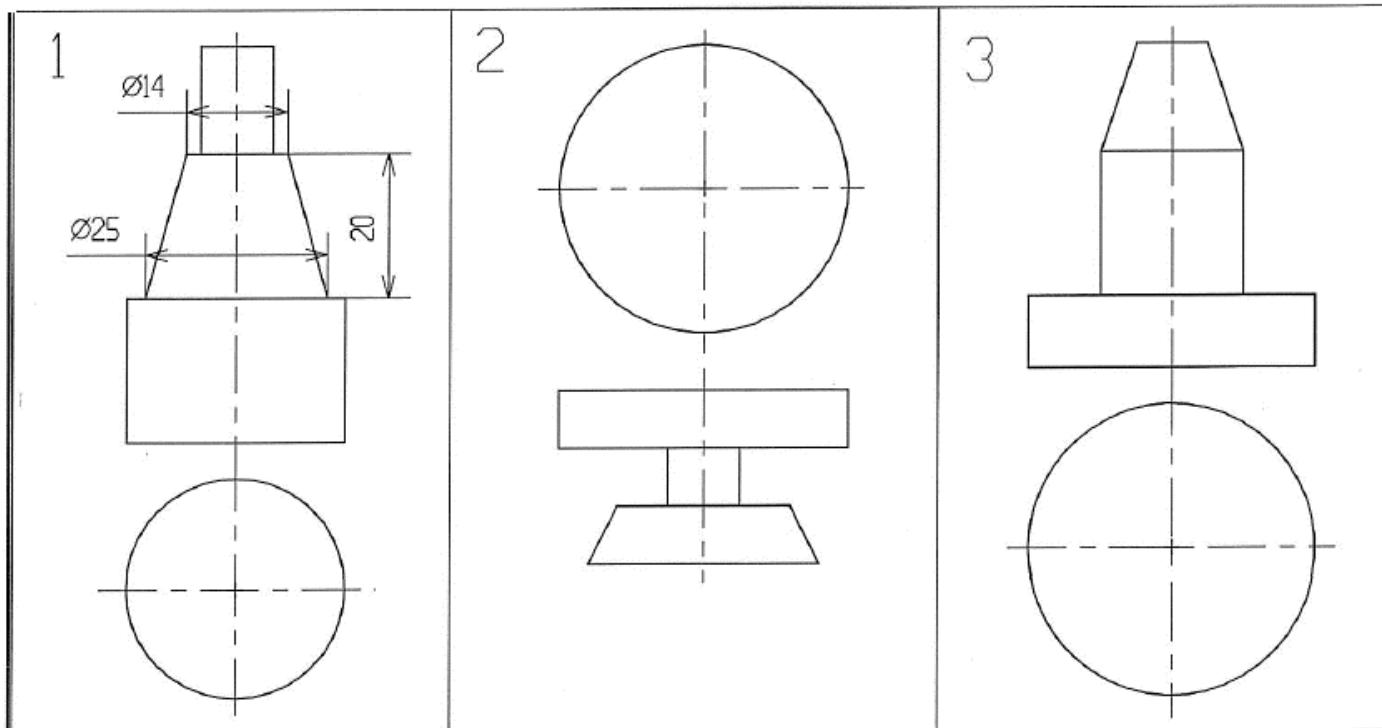
Voici 4 pièces A, B, C, D de formes cylindriques et prismatiques. On vous demande de dessiner :

- pour la pièce A une demi-vue de dessus,
- pour la pièce B un quart de vue de dessus,
- pour la pièce C une demi-vue de dessus et une demi-vue de gauche
- pour la pièce D une demi-vue de dessus

A**B****C****D**

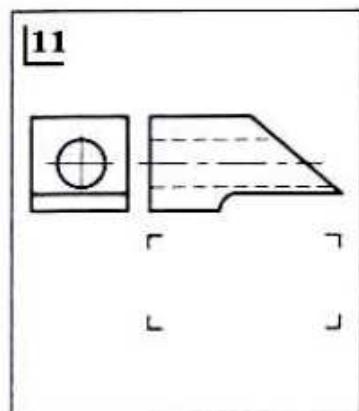
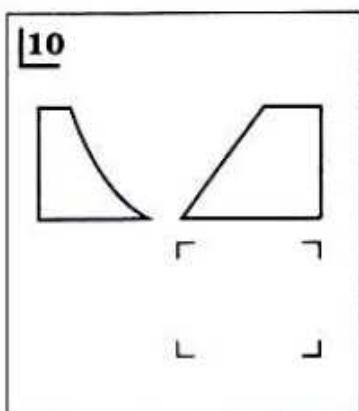
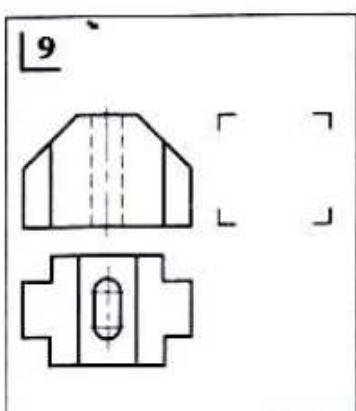
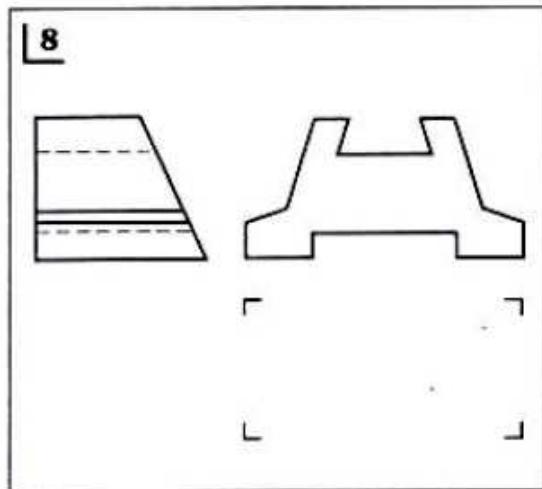
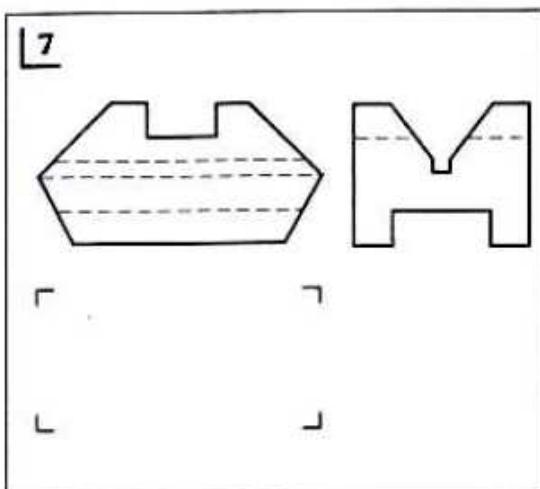
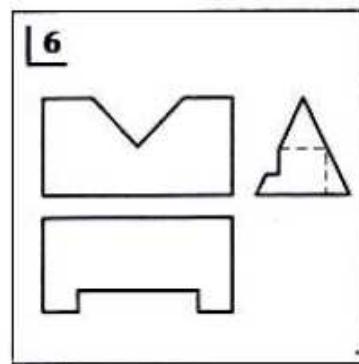
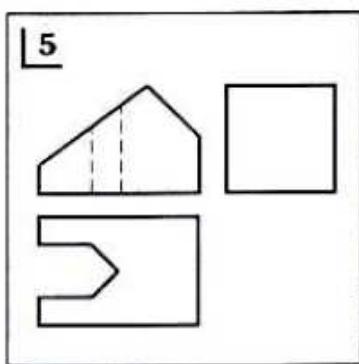
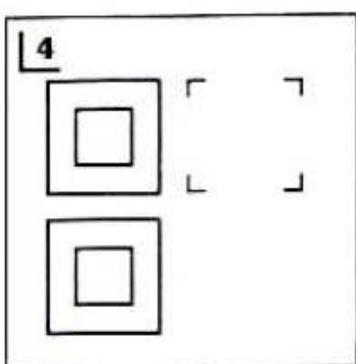
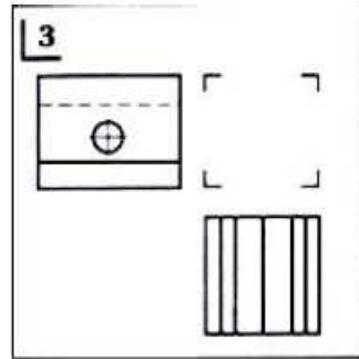
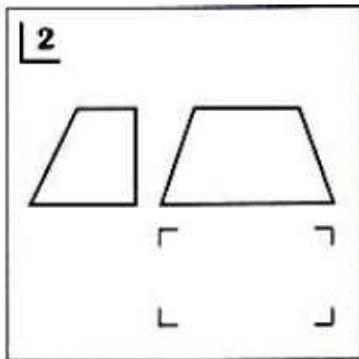
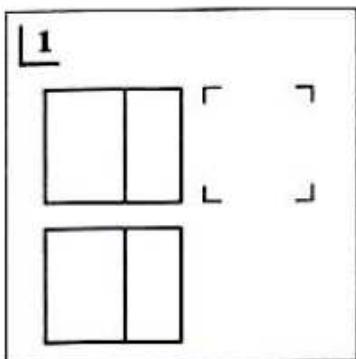
Voici 5 pièces représentées à l'échelle 1 suivant 2 vues et leurs 5 perspectives.

1. Complétez la deuxième vue



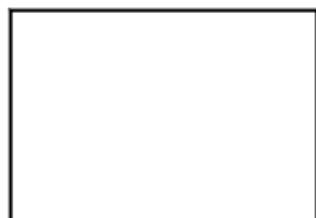
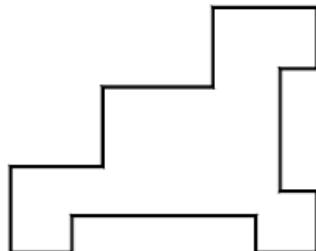
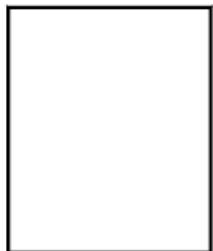
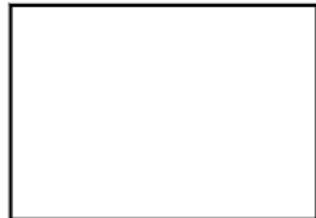
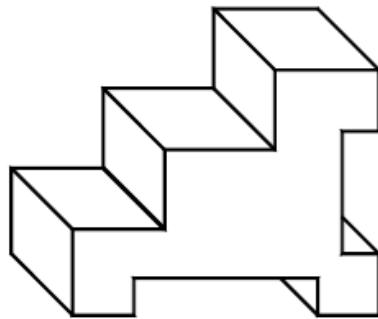
V) Exercice 5

Tracer les vues manquantes

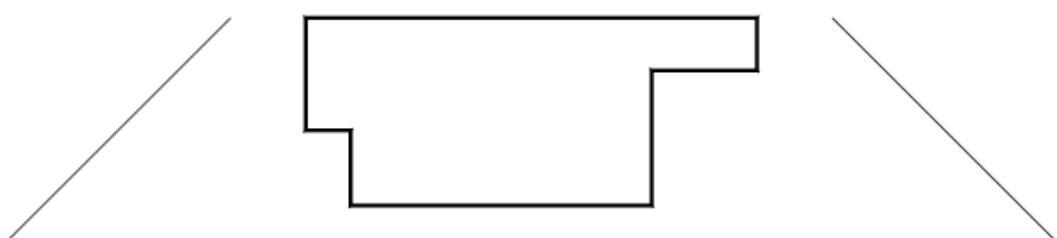
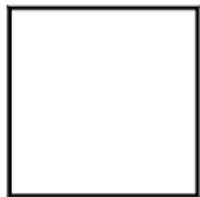
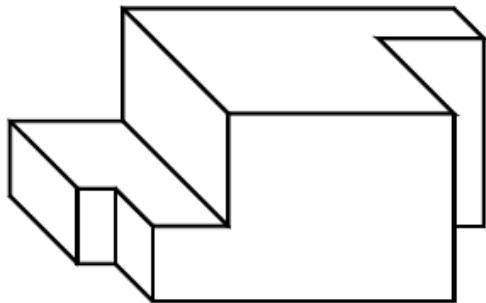


VI) Exercice 6

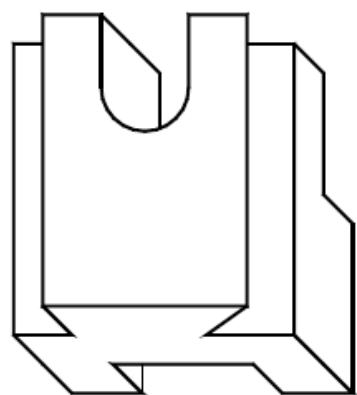
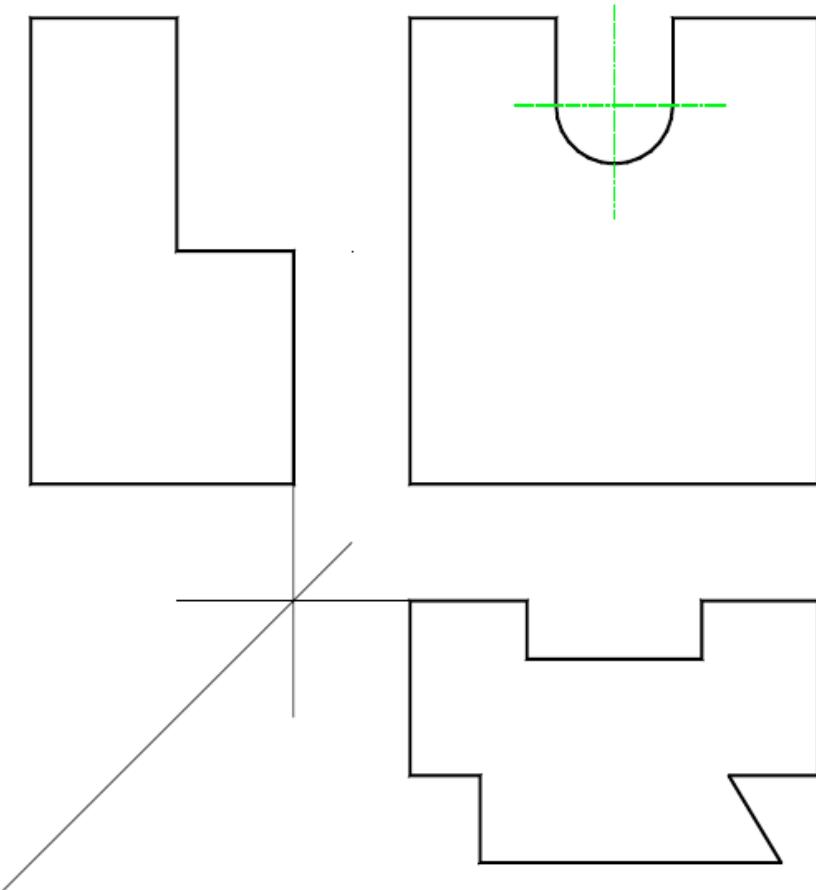
Compléter les vues esquissées en s'aidant de la perspective et des autres vues.



Compléter les vues esquissées en s'aidant de la perspective et des autres vues.



Compléter les vues esquissées en s'aidant de la perspective et des autres vues.



VII) EXERCICE 7

Compléter les vues avec les formes manquantes suivant l'exemple donné ci dessous

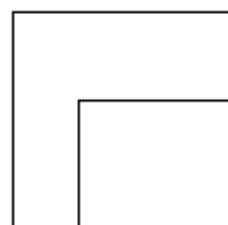
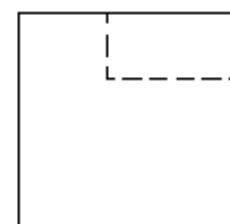
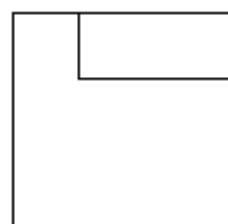
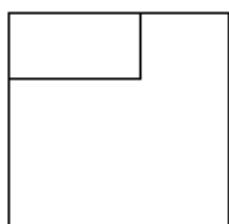
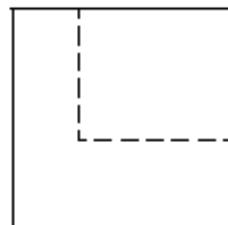
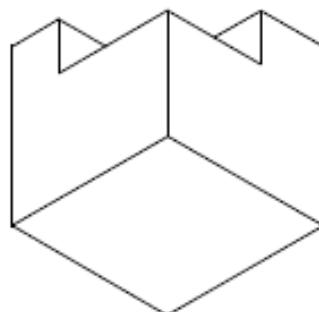
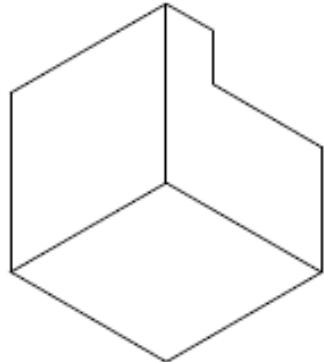
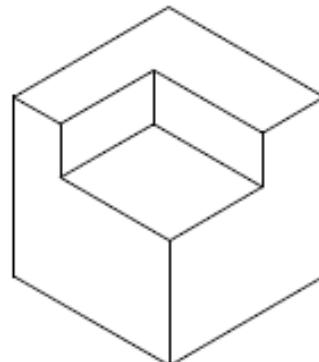
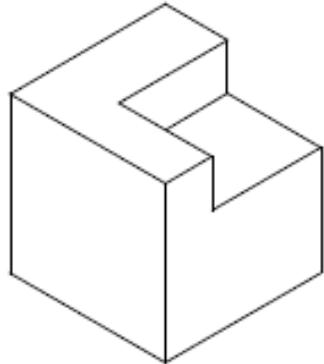


Figure 1

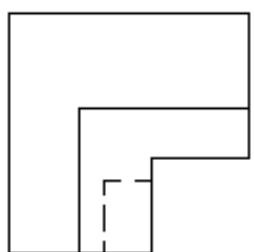
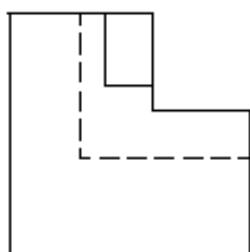
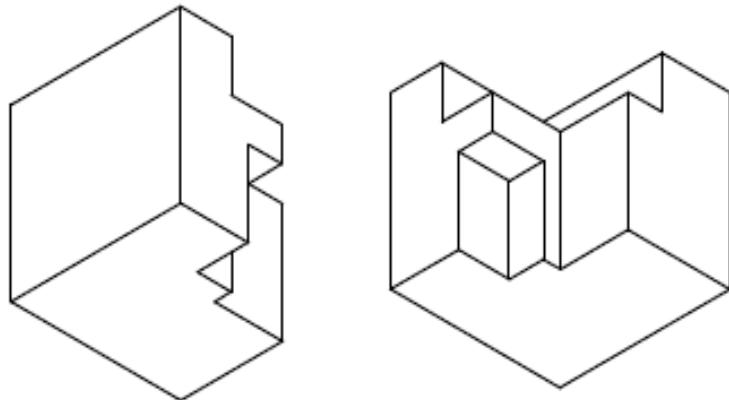
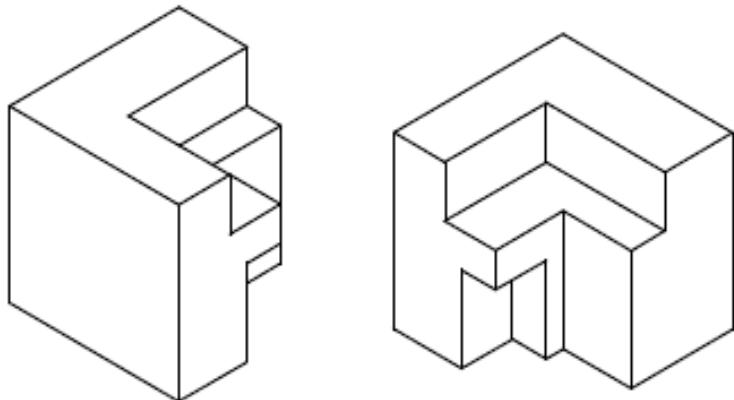


Figure2

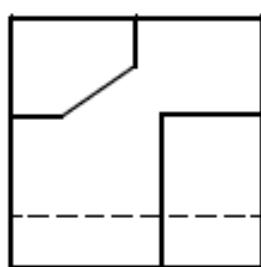
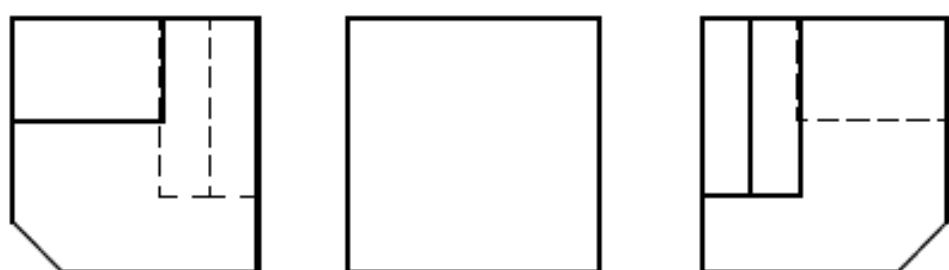
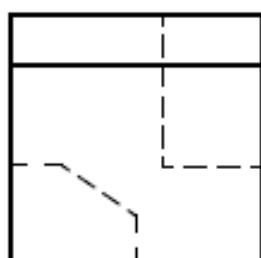
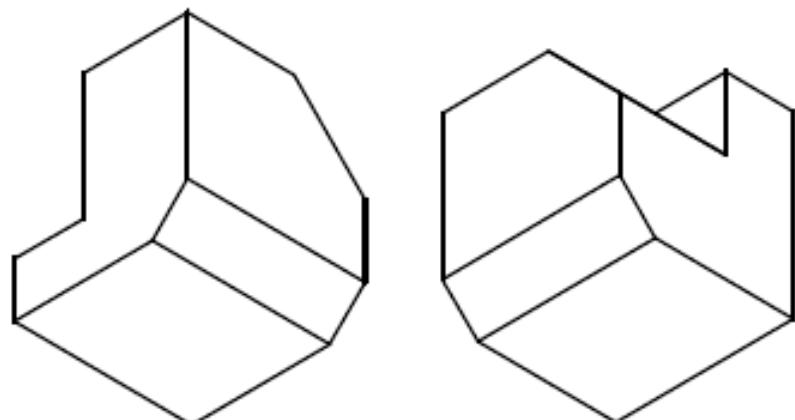
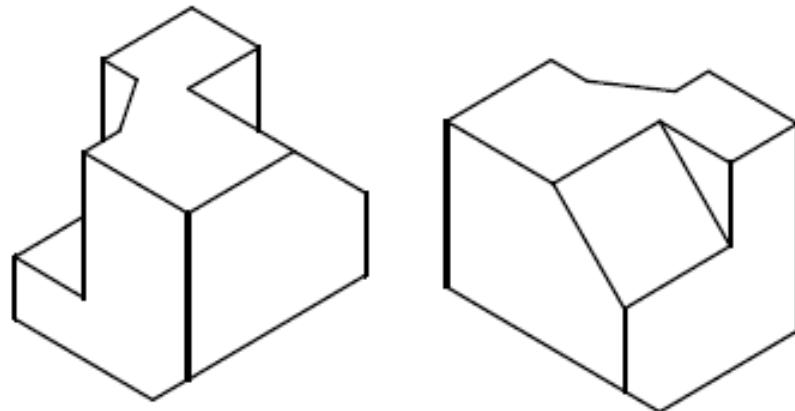


Figure 3

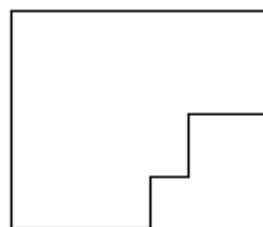
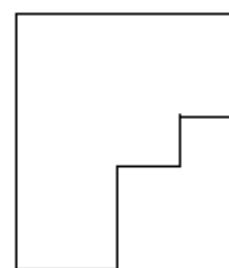
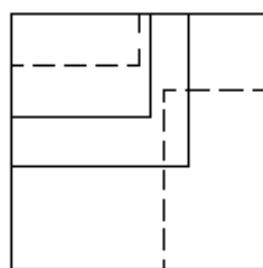
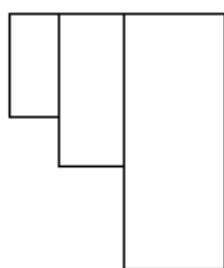
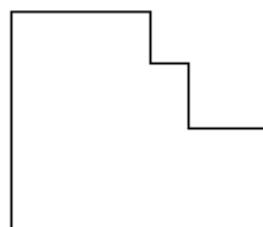
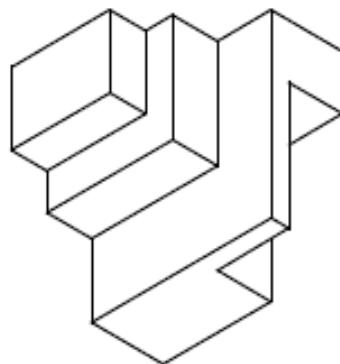
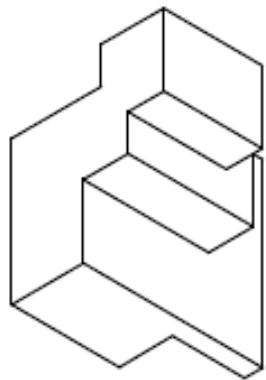
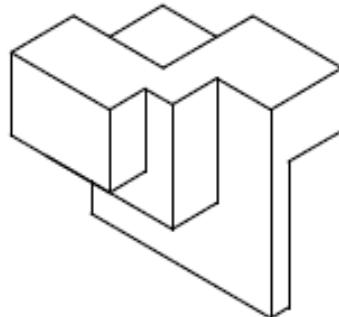
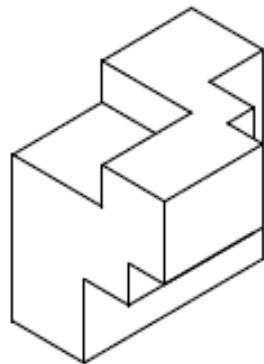


Figure 4

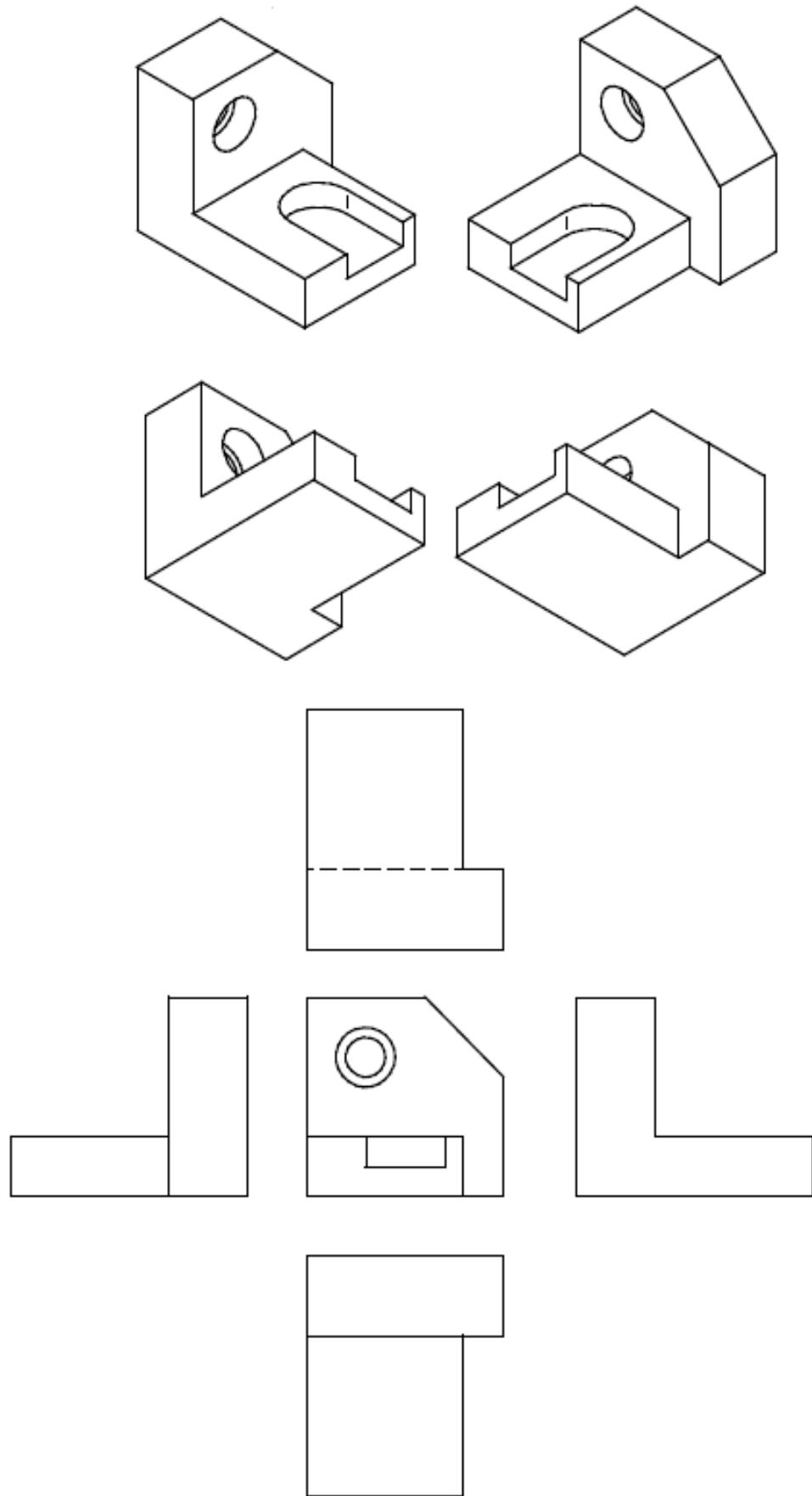
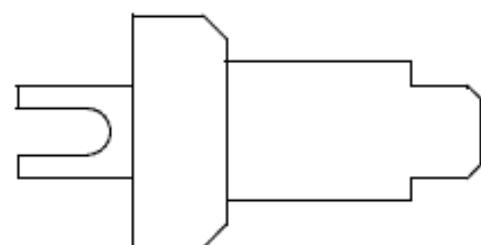
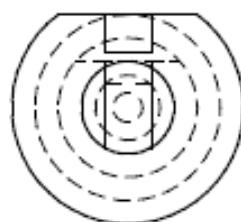
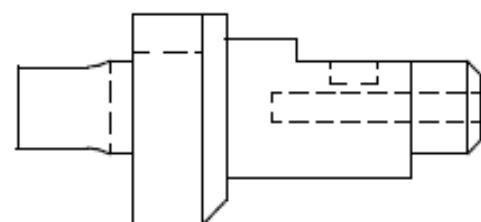
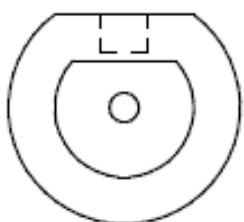
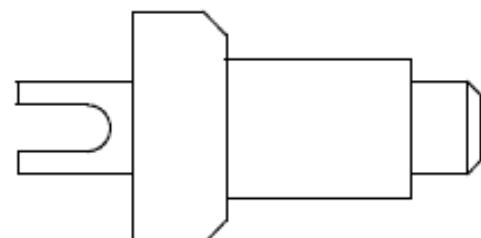
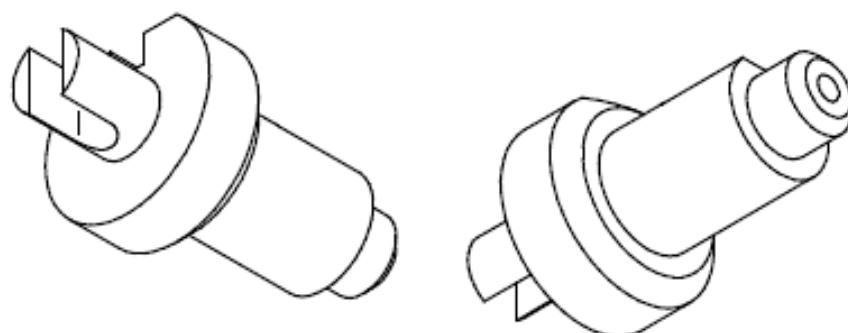
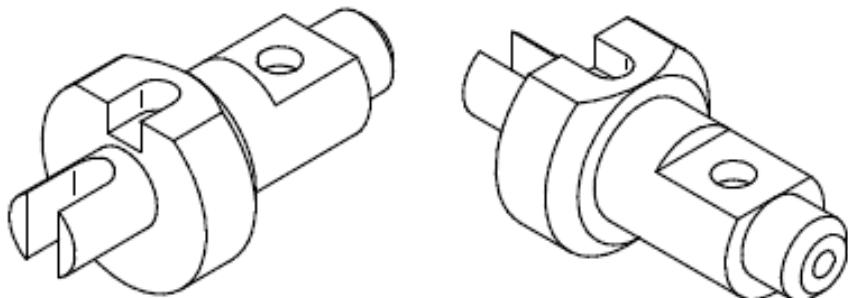
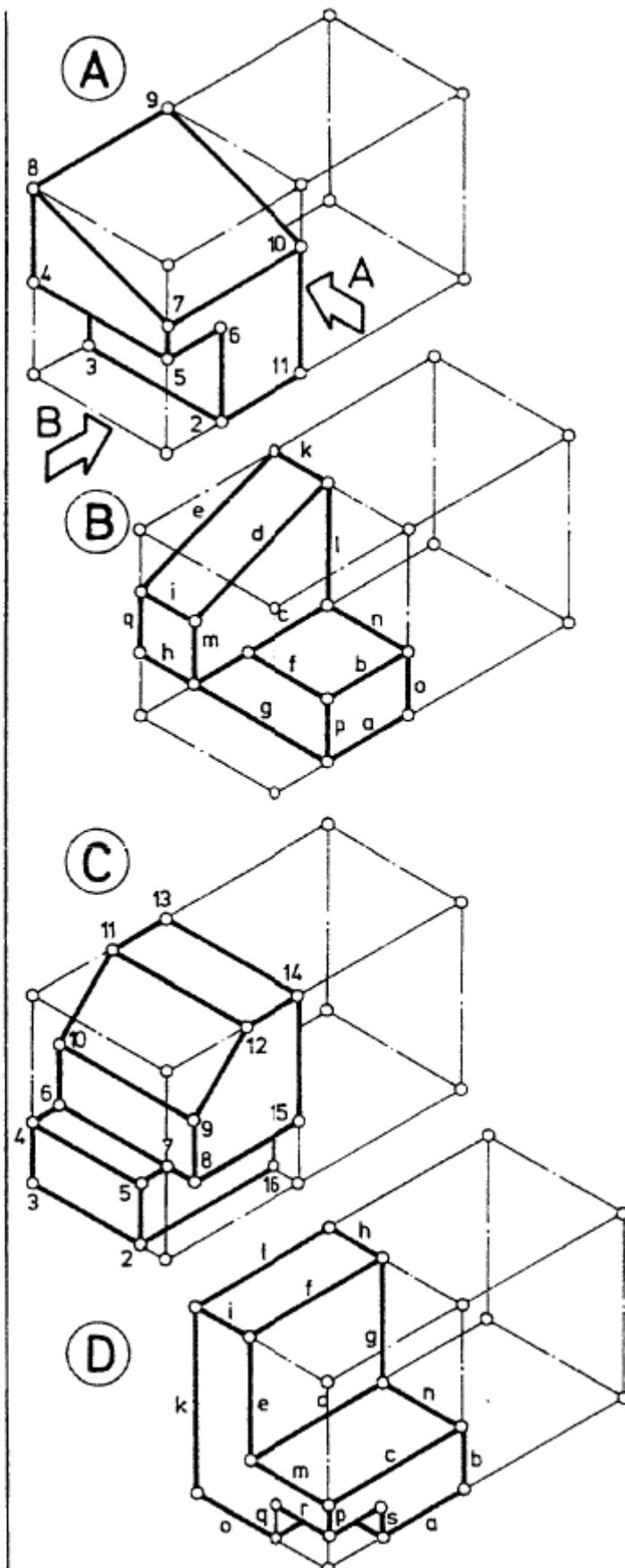
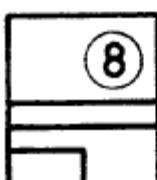
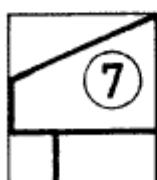
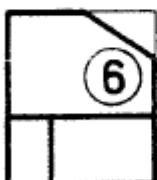
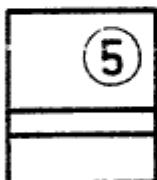
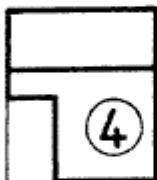
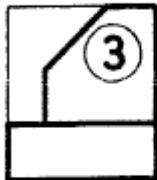
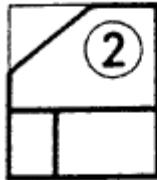
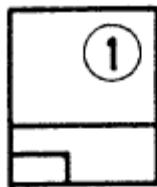


Figure 5

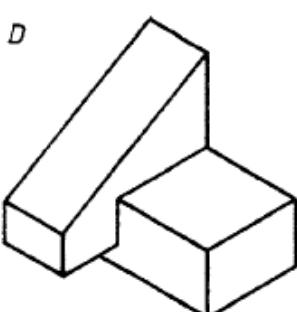
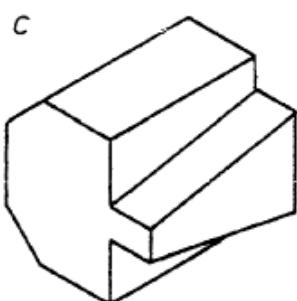
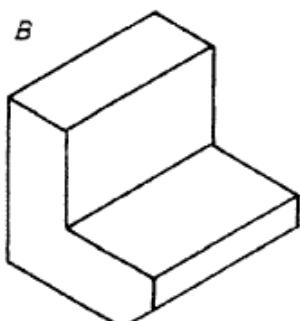
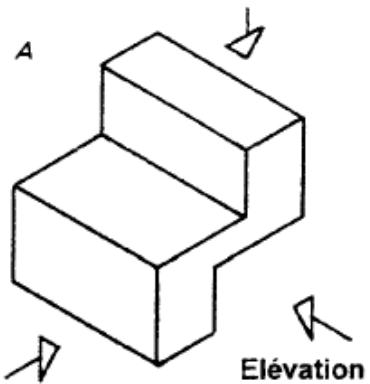
VIII) Exercice 8

Corps	Vue A
(A)	
(B)	
(C)	
(D)	

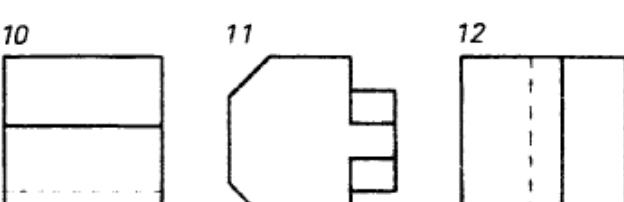
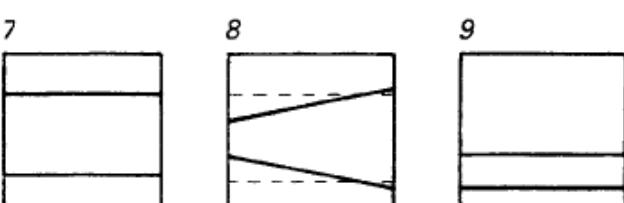
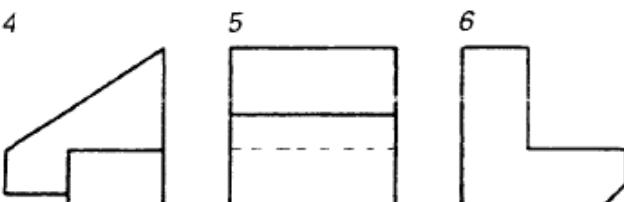
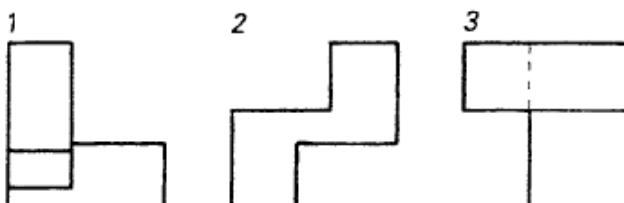
Corps	Vue	Points ou arêtes visibles
	A	
(A)	B	
	A	
(B)	B	
	A	
(C)	B	
	A	
(D)	B	

IX) Exercice 9

Mettez dans l'ordre les trois vues des pièces A, B, C, D en inscrivant les chiffres dans le tableau.

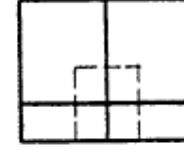
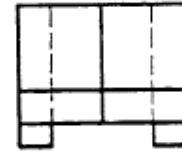
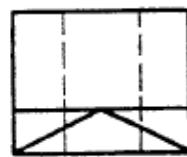
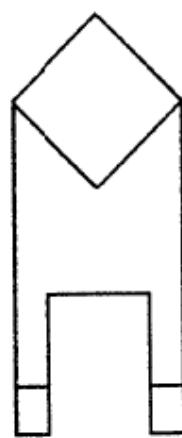
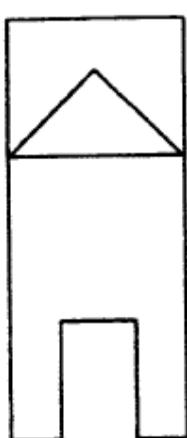
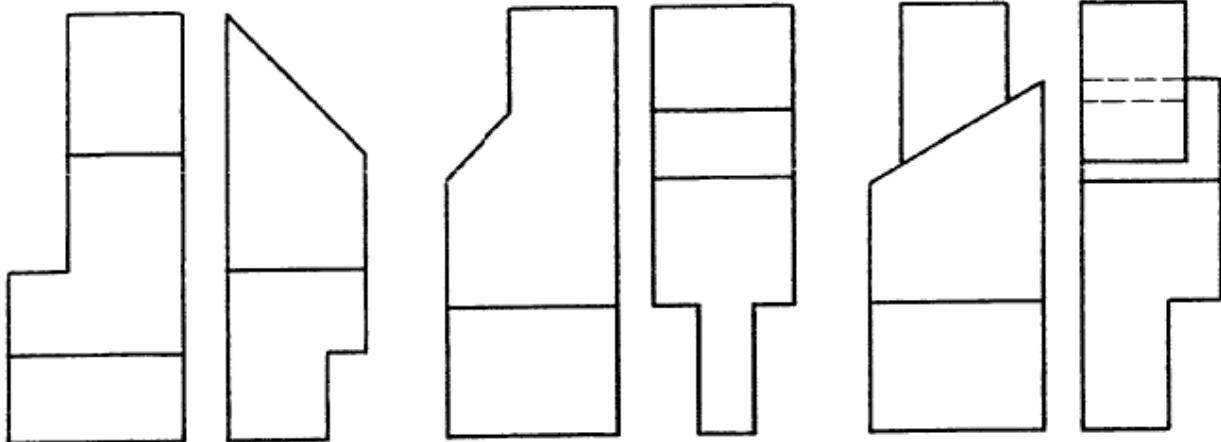


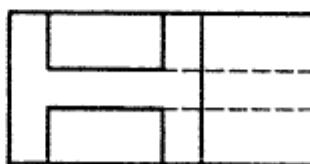
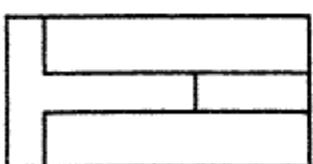
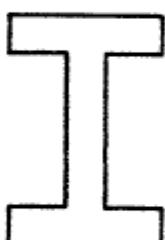
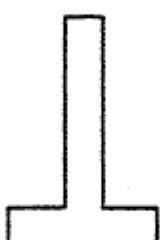
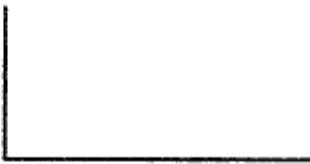
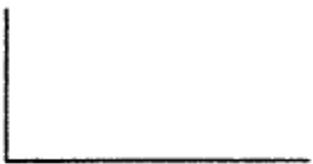
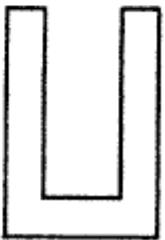
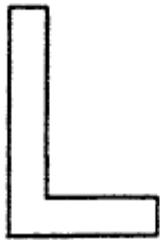
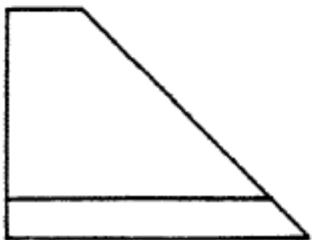
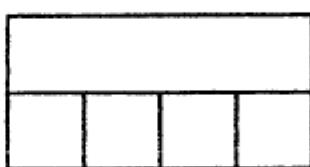
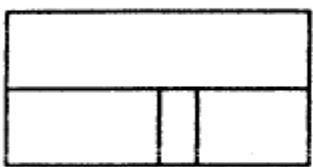
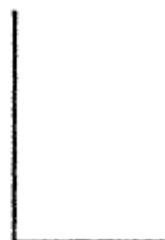
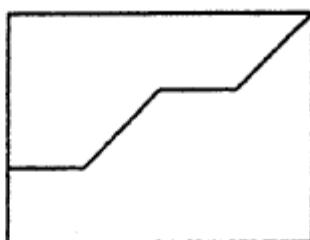
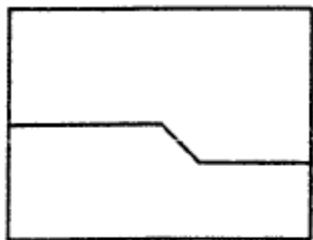
	A	B	C	D
↗				
→				
↘				



X) Exercice 10 : Compléter la vue manquante

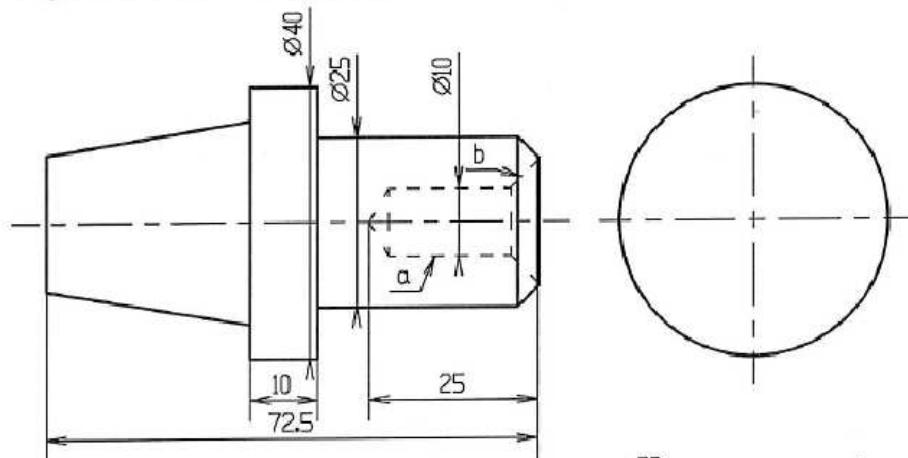
Recherchez la vue manquante.



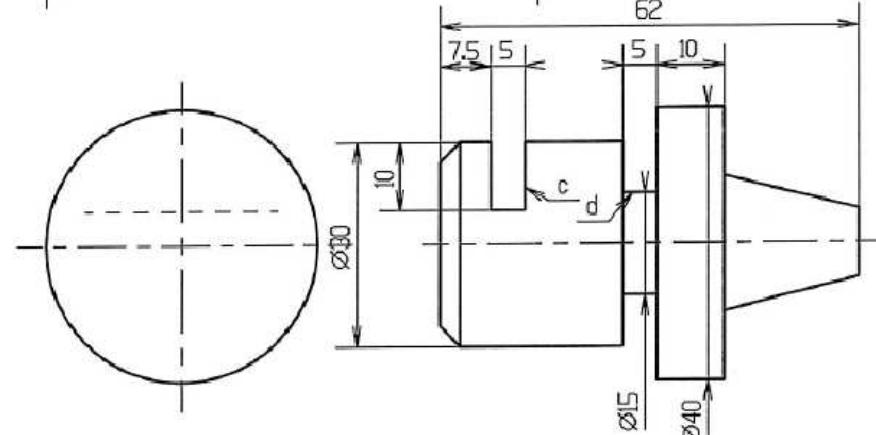


XI) Exercice 11 :**Exercice - Compléter les vues avec les formes décrites****1. 1ère Pièce**

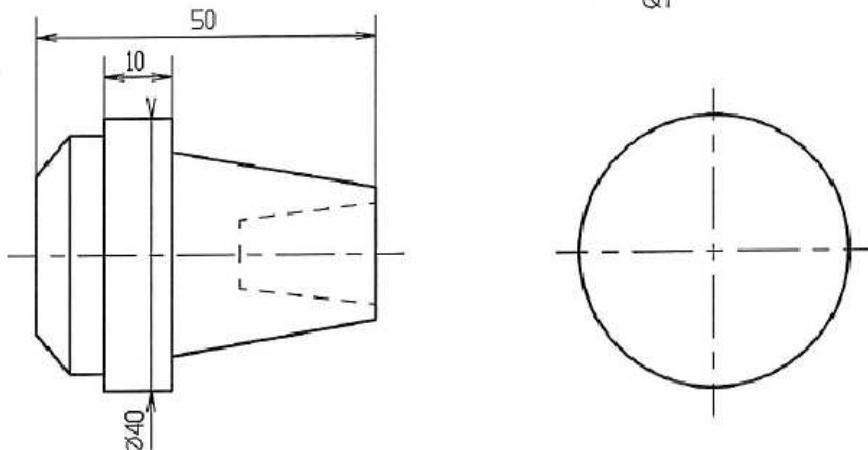
- compléter la vue de gauche.
- complétez la cotation (6cotes), pour le grand cône méthode des diamètres.

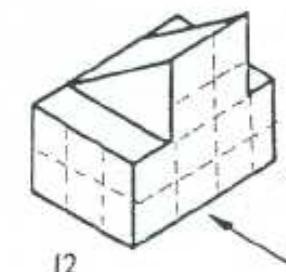
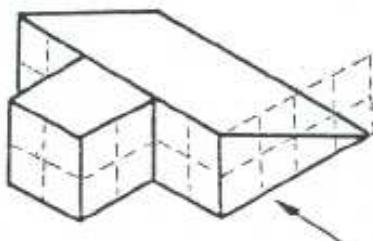
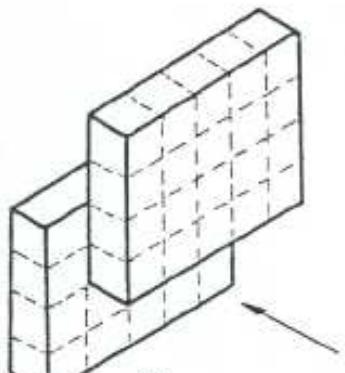
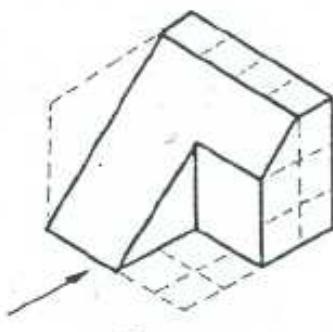
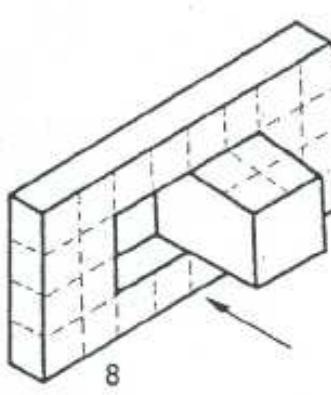
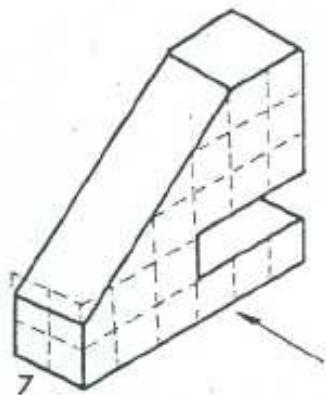
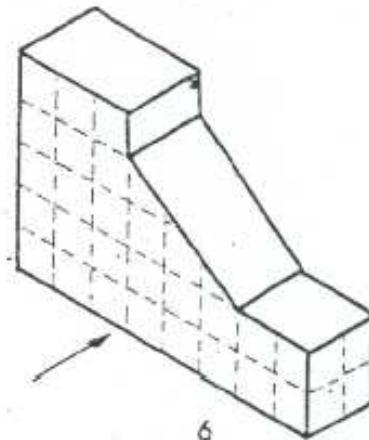
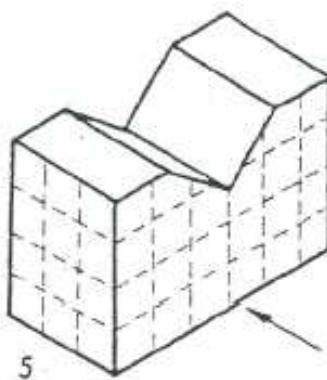
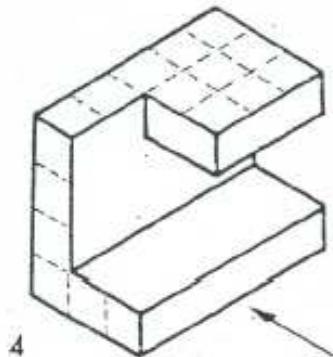
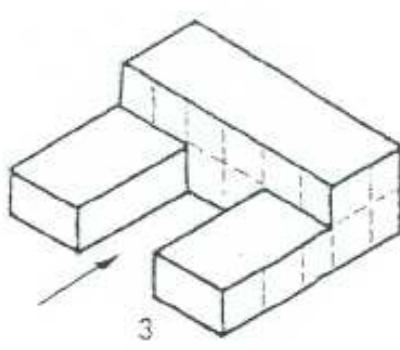
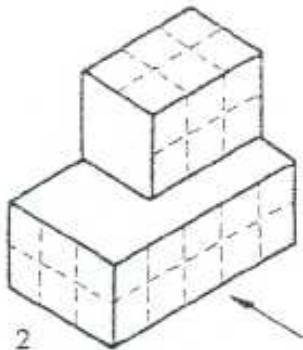
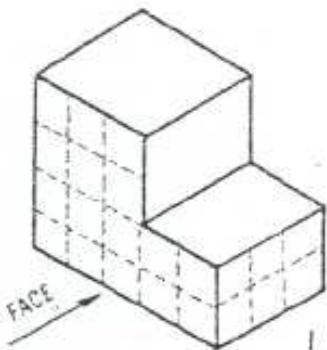
**2. 2ème Pièce**

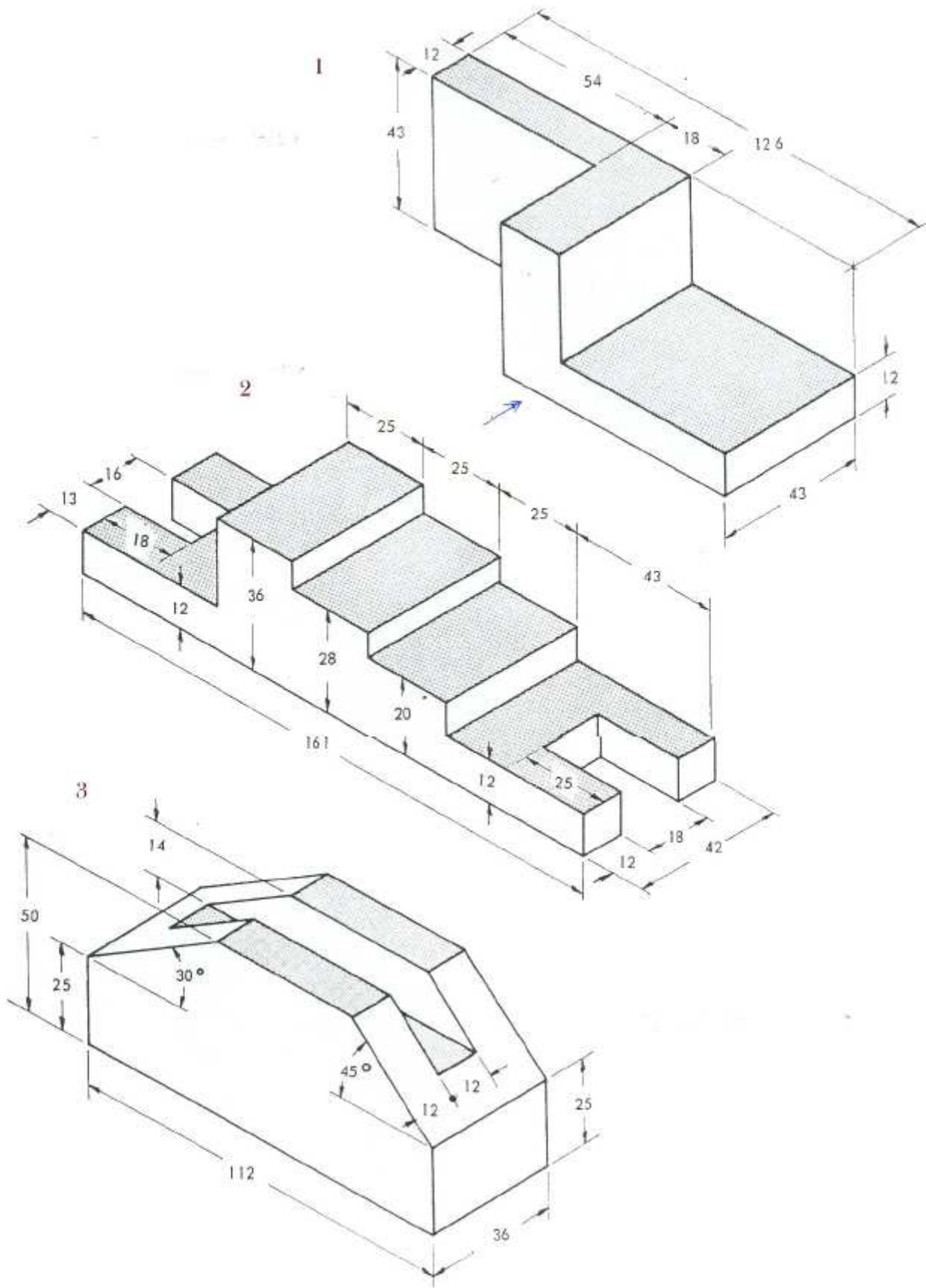
- complétez la vue de droite.
- complétez la cotation (4 cotes), pour le grand cône méthode de la conicité.

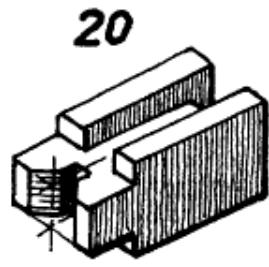
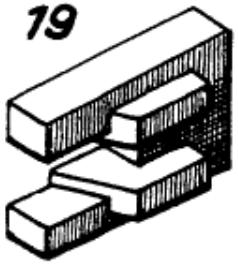
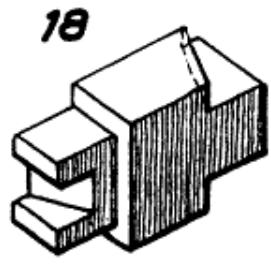
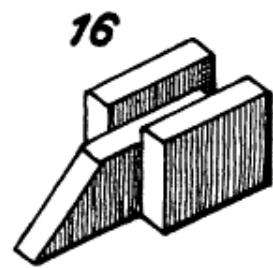
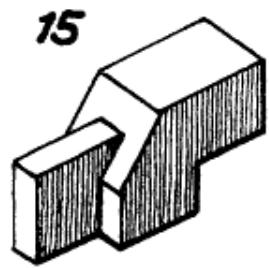
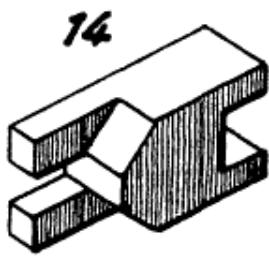
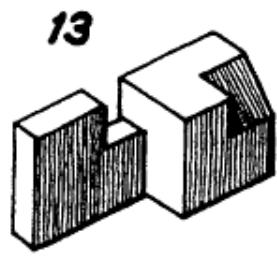
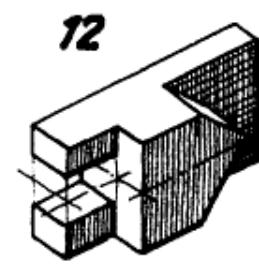
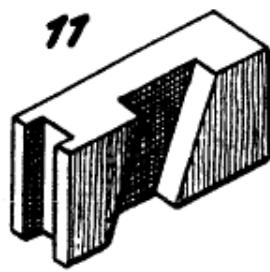
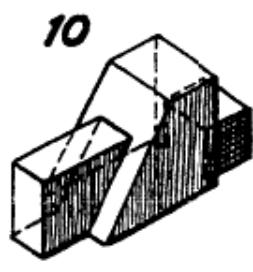
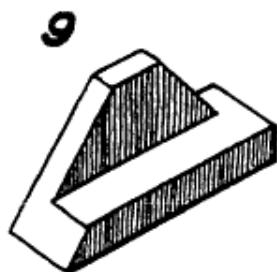
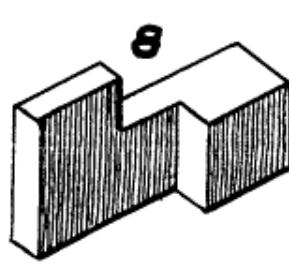
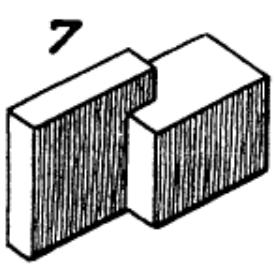
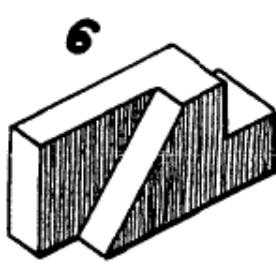
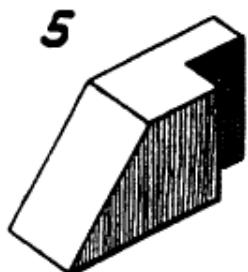
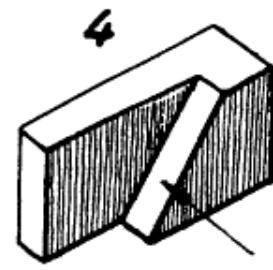
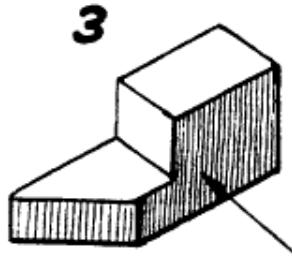
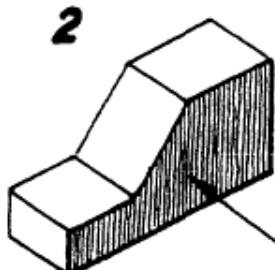
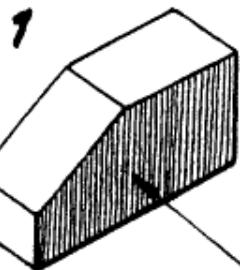
**3. 3ème Pièce**

- complétez la vue de gauche.
- complétez la cotation (9 cotes), utilisez la méthode du 1/2 angle au sommet pour les 3 cônes:
angles: 50°, 10° et 7°.



XII) Exercice 12 : Représenter ce que l'on voit

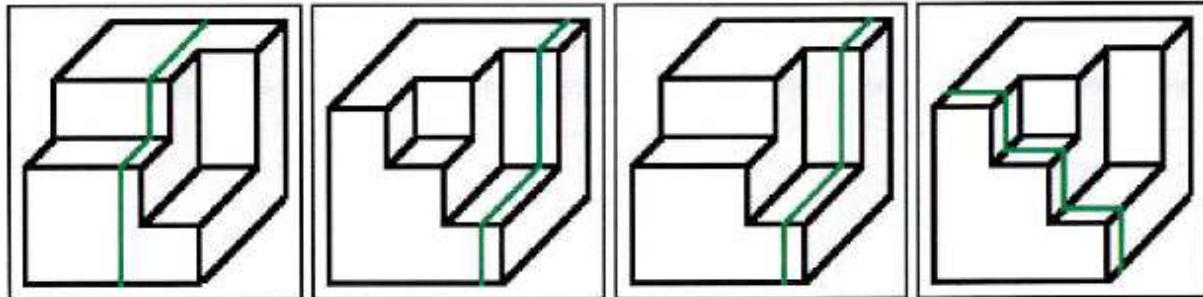
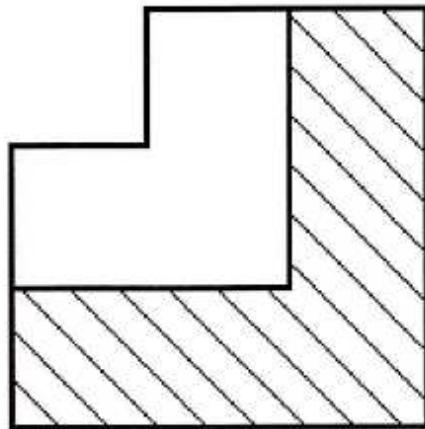




XIII) Exercice 13 : Coups

Parmi les 4 perspectives 1, 2, 3 ou 4, quelle est celle dont le plan de coupe correspond à la vue ci-dessous.

(Cocher la bonne réponse)



1



2



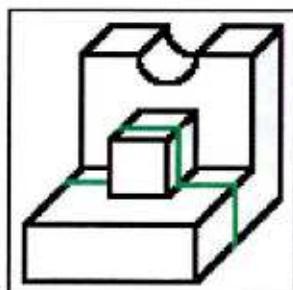
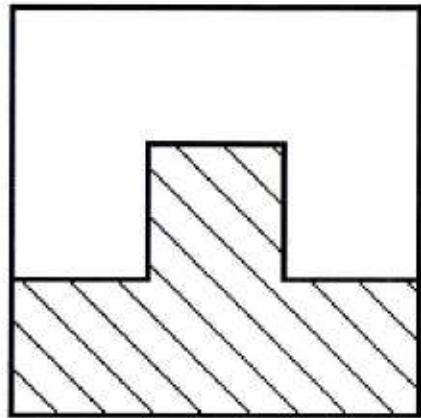
3



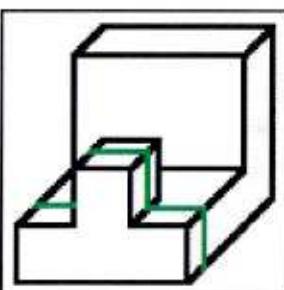
4



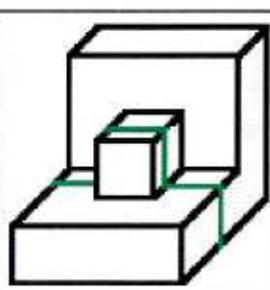
Parmi les 4 perspectives 1, 2, 3 ou 4, quelle est celle dont le plan de coupe correspond à la vue ci-dessous.
(Cocher la bonne réponse)



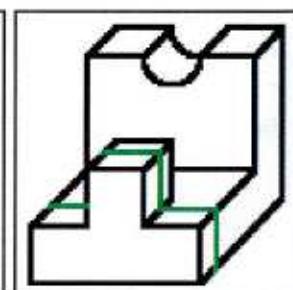
1



2

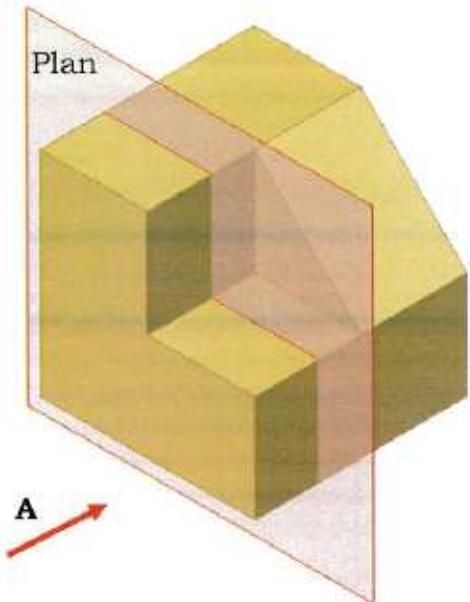
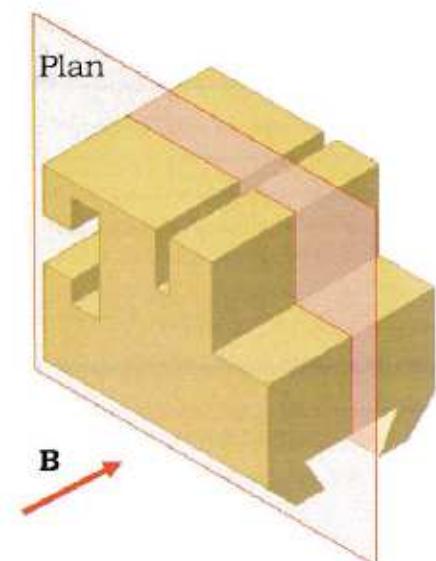
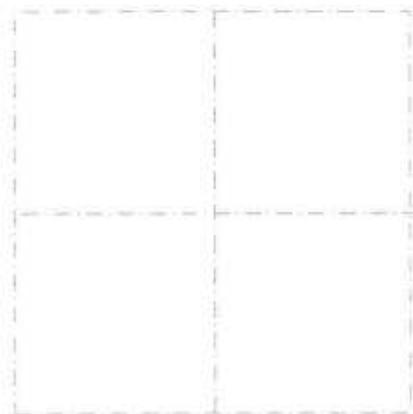
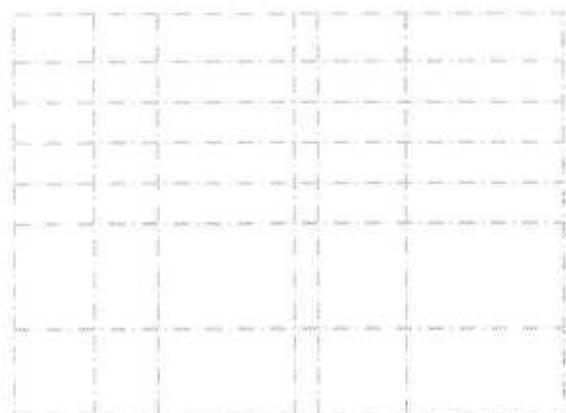


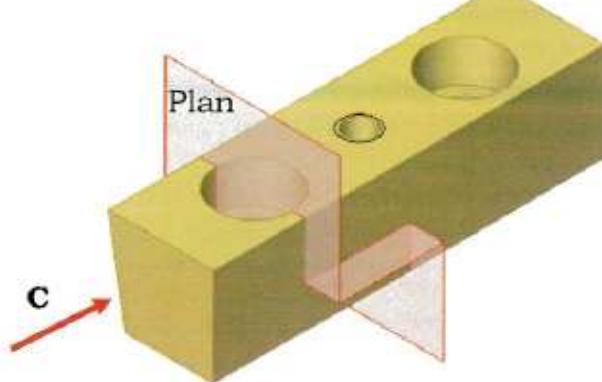
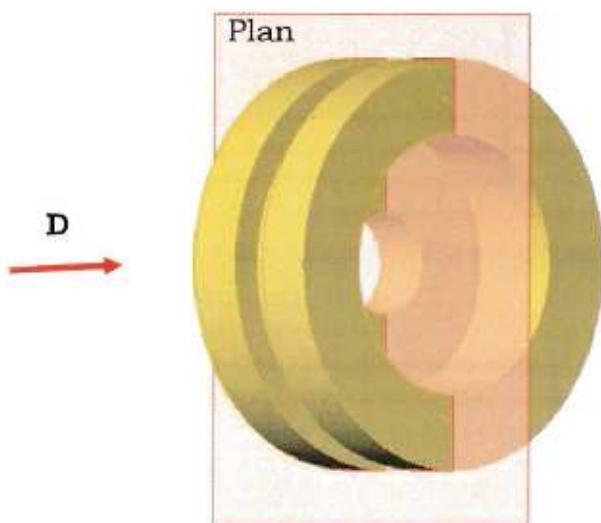
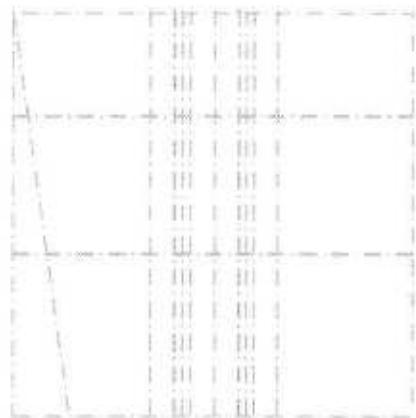
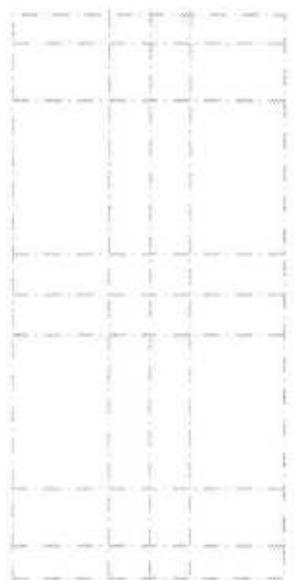
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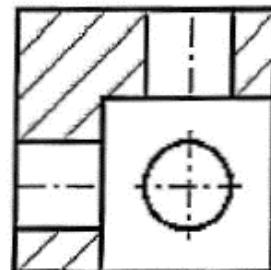
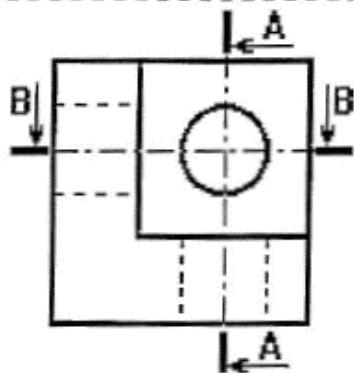
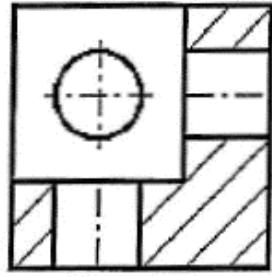
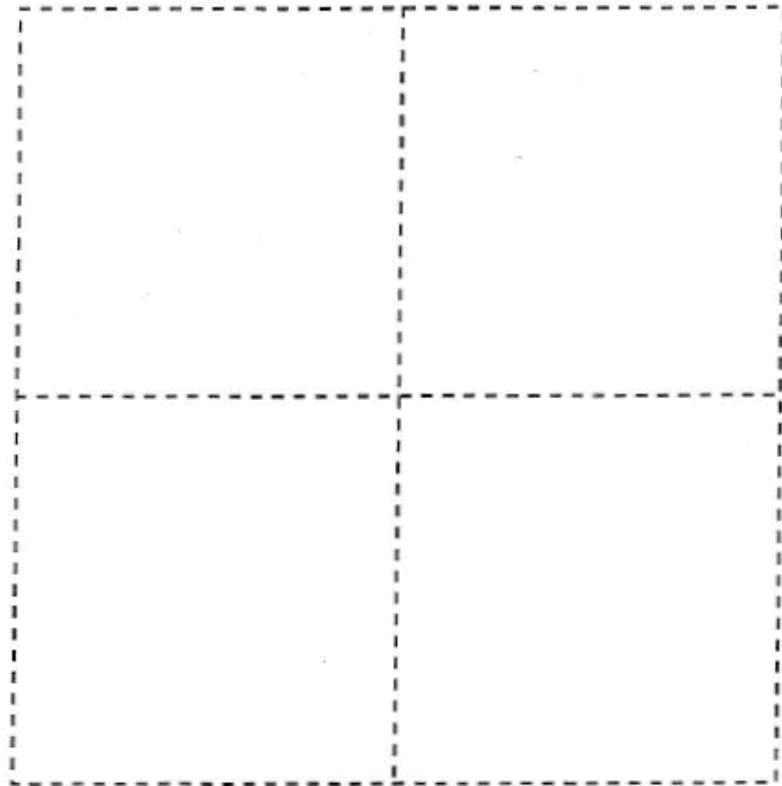
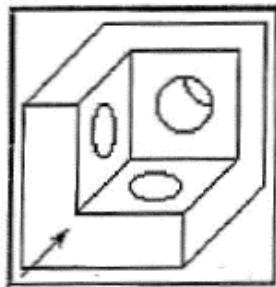
A l'aide des perspectives ci-dessous, représenter les vues en coupe.
(hachures, arêtes vues et cachées)

**A - A****B - B**

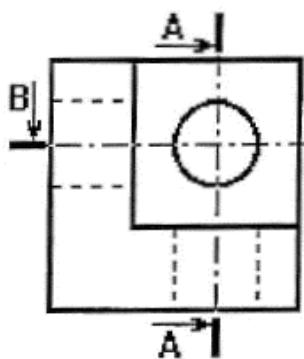
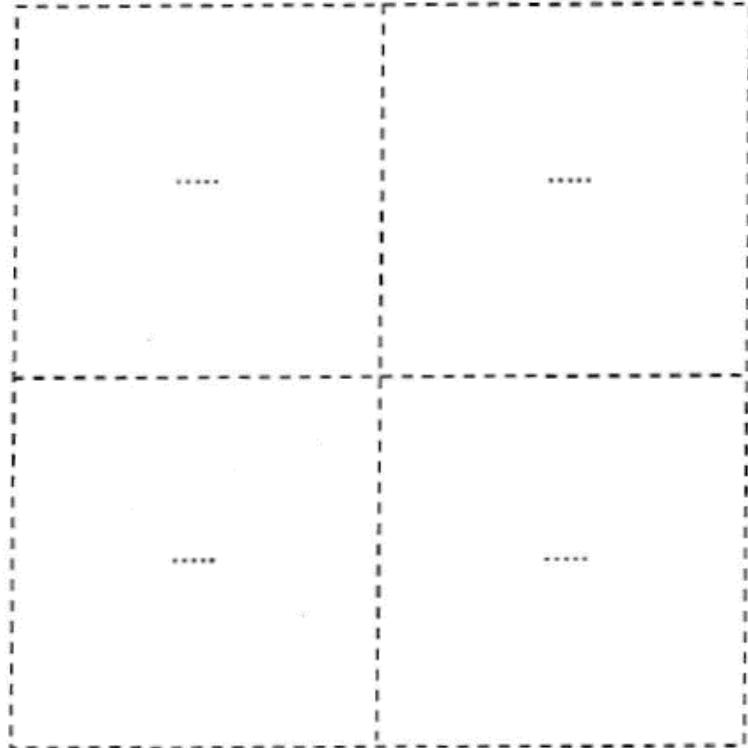
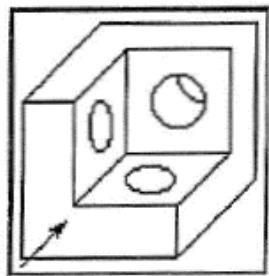
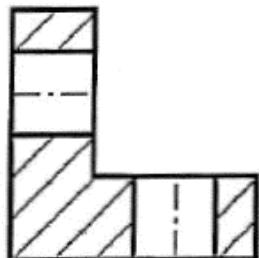
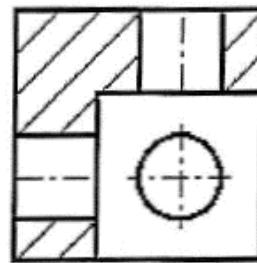
**C - C****D - D**

XIV) EXERCICE 14 : Projections et Coupes

Par rapport à la vue en perspective, replacer les 3 vues ci-dessous correctement.
(la flèche désigne la vue de face)

123

Par rapport à la vue en perspective, replacer les 3 vues ci-dessous correctement.
(la flèche désigne la vue de face)

**1****2****3**

XV) Exercice 15 : Coupes

Soit la pièce ci-dessous représentée suivant 3 vues incomplètes,

On vous demande de dessiner :

Une vue de face coupe A-A, une vue de gauche coupe B-B et une vue de dessus coupe C-C

Pour cela on vous demande de réaliser les activités suivantes:

Q1.1- ECRIVEZ les noms des coupes A-A, B-B et C-C au-dessus des vues correspondantes.

Q1.2- En vous aidant des plans de coupe déjà tracés, **REPRESENTEZ** les flèches et leurs désignations correspondantes sur chaque plan de coupe. (A-A, B-B...)

Q1.3- En vous aidant du plan de coupe A-A, **COLORIEZ** en bleu la matière coupée sur la vue en perspective.

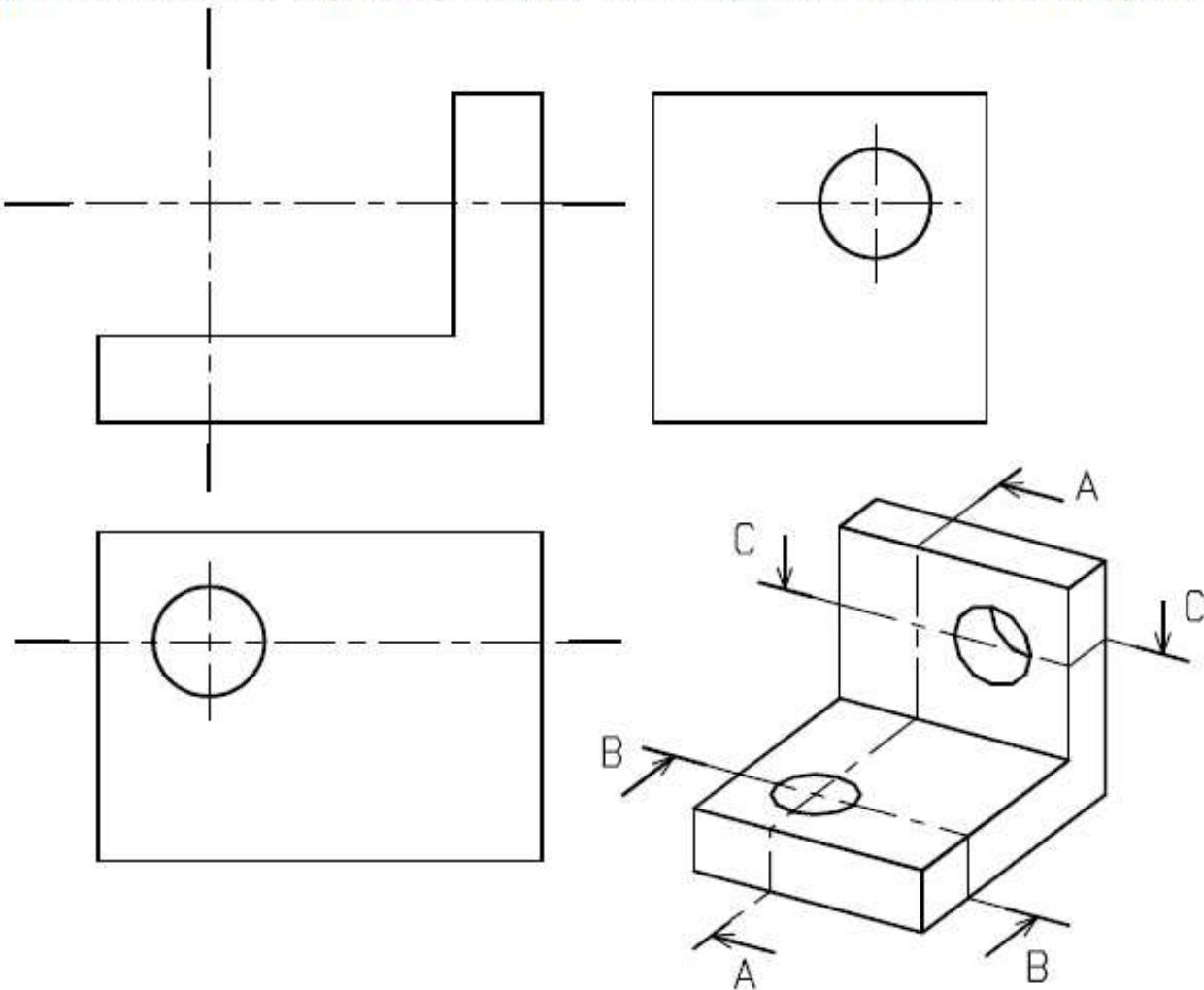
Q1.4- En vous aidant de la question précédente, **TRANSFORMEZ** la vue de face en **coupe A-A**.

Q1.5- En vous aidant du plan de coupe B-B, **COLORIEZ** en rouge la matière coupée sur la vue en perspective.

Q1.6- En vous aidant de la question précédente, **TRANSFORMEZ** la vue de gauche en **coupe B-B**.

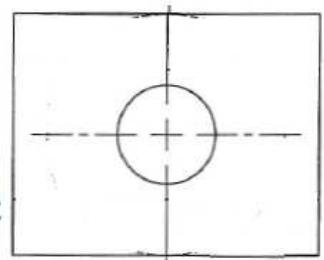
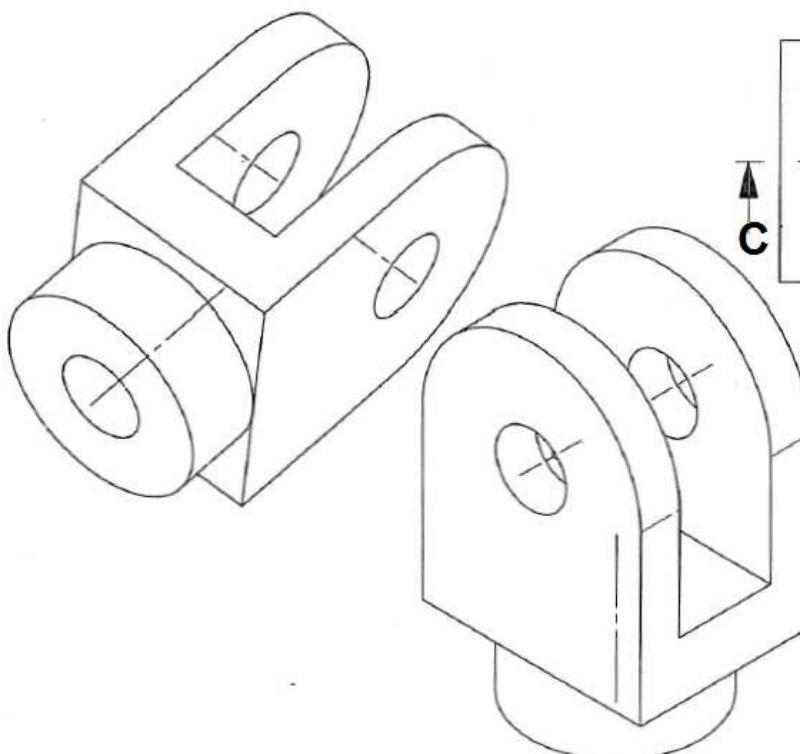
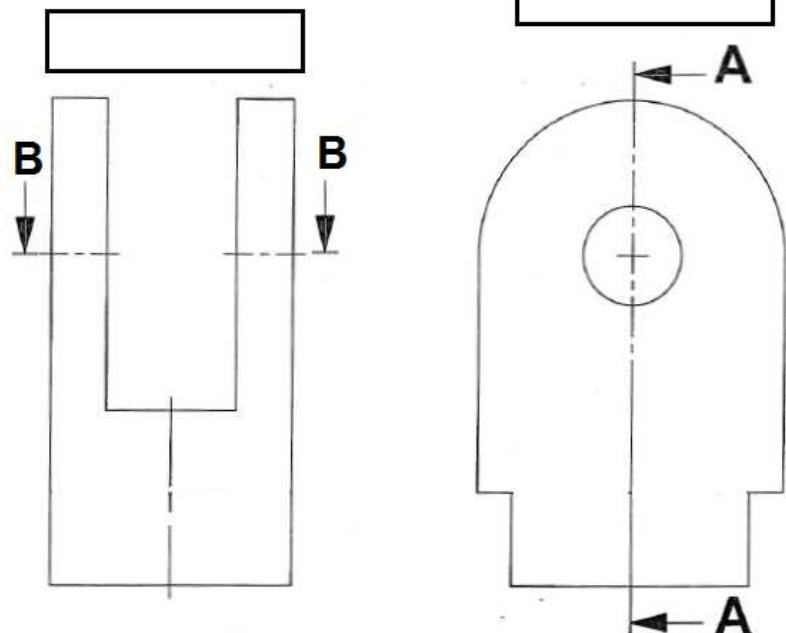
Q1.7- En vous aidant du plan de coupe C-C, **COLORIEZ** en vert la matière coupée sur la vue en perspective.

Q1.8- En vous aidant de la question précédente, **TRANSFORMEZ** la vue de dessus en **coupe C-C**.



XVI) EXERCICE 16 : Correspondances entre vues

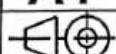
- 1) Préciser dans les cadres les noms des coupes
2) Préciser sur les coupes les éléments manquants



Echelle
1:1

Nom :

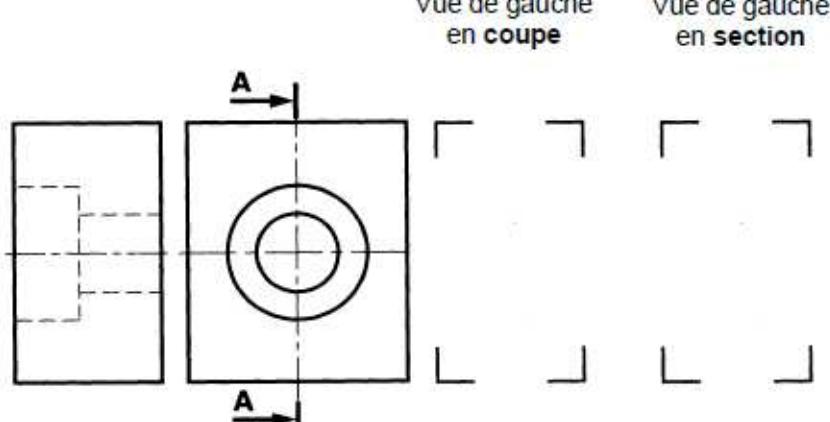
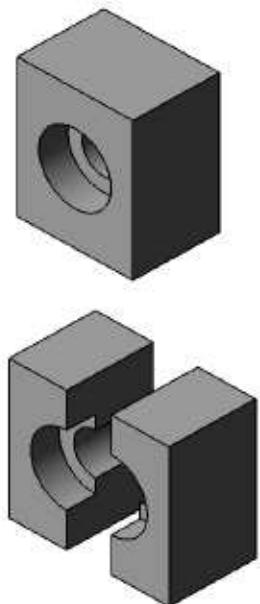
A4



XVII) Exercice 17 : Coupes & Sections

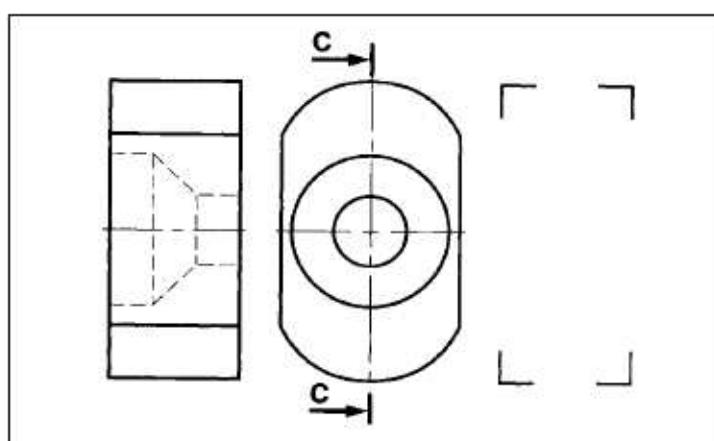
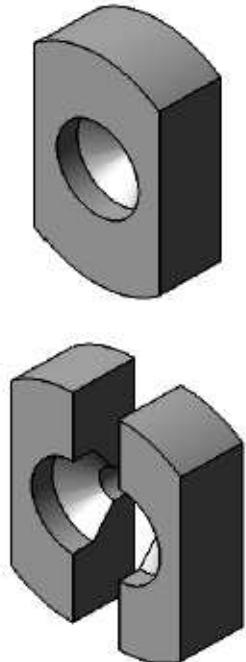
Q3.1- Dans les cadres prévus à cet effet, **REALISEZ** la vue de gauche en coupe A-A pour la pièce ci-dessous. Puis la vue de gauche en **section**.

Matière de la pièce: Aluminium



Q3.2- Dans le cadre prévu à cet effet, **REALISEZ** la vue de gauche en coupe C-C pour la pièce ci-dessous.

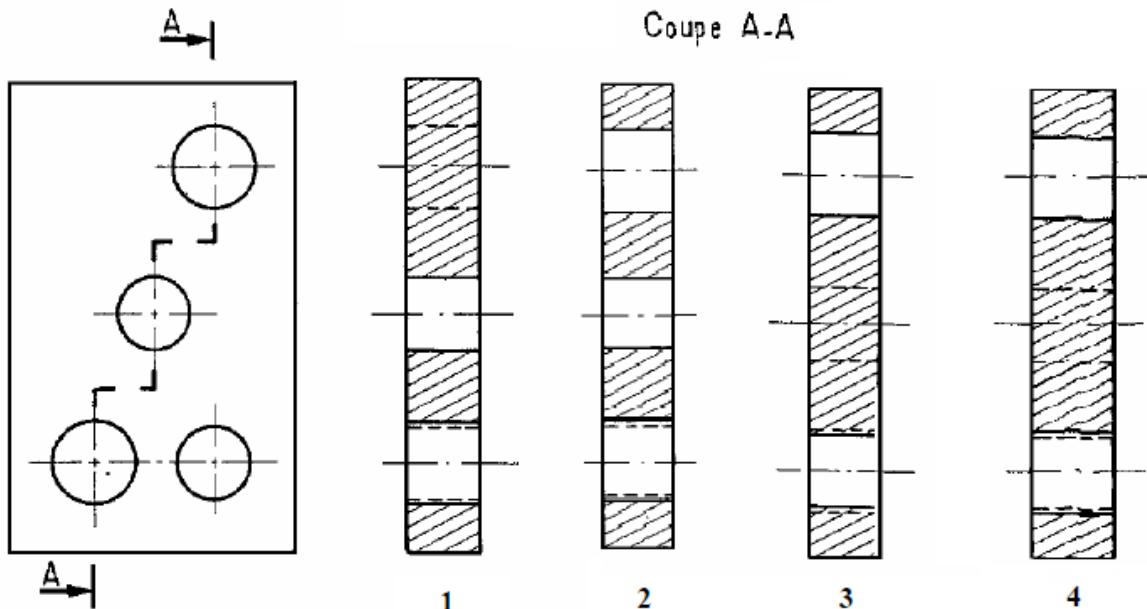
Matière de la pièce: Bronze

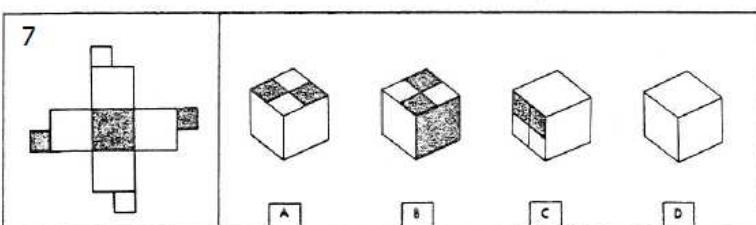
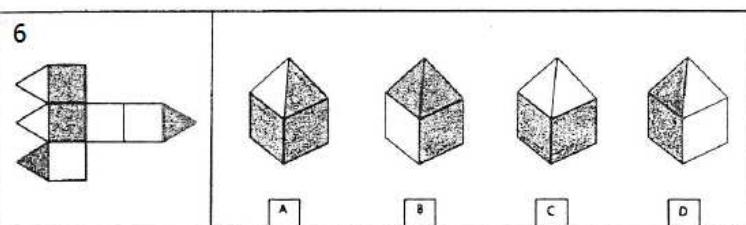
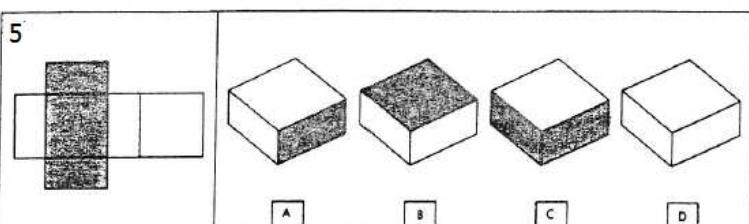
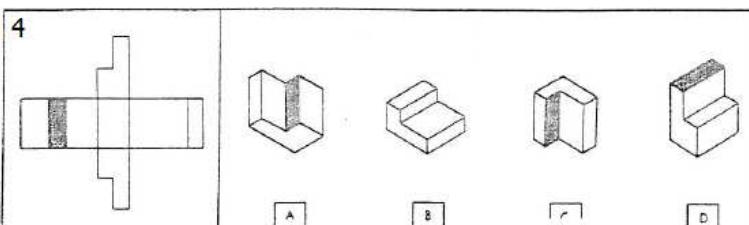
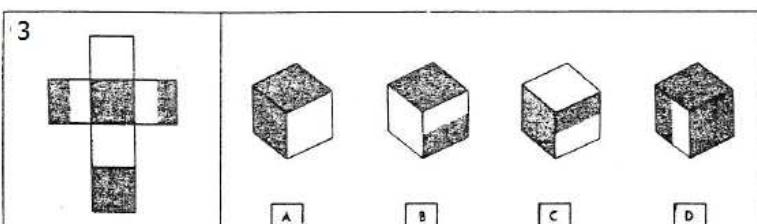
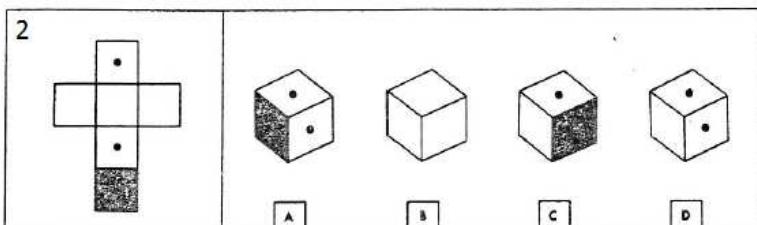
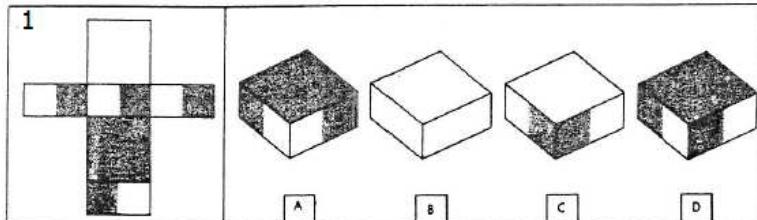


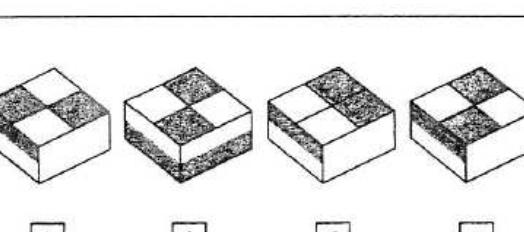
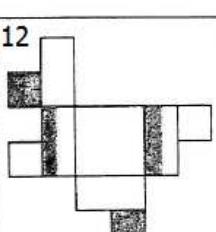
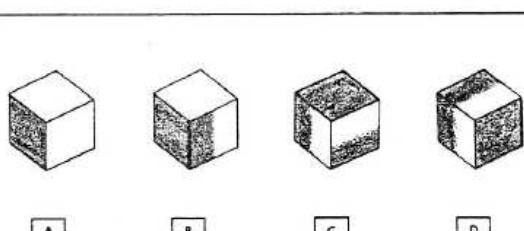
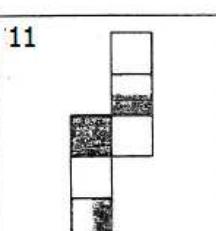
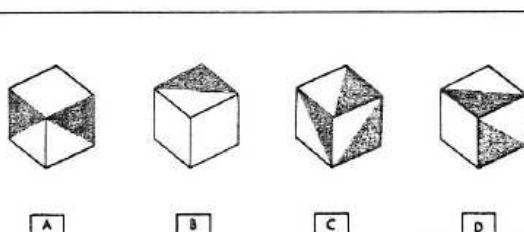
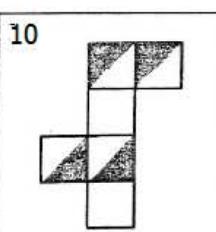
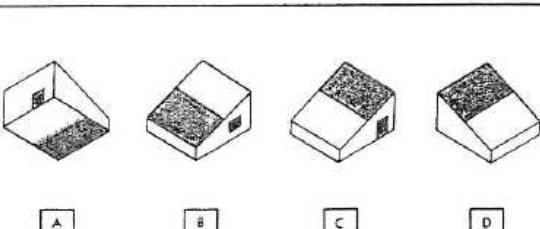
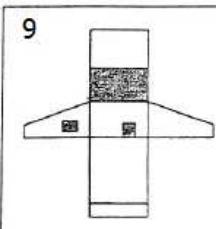
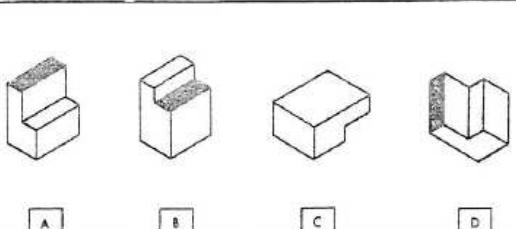
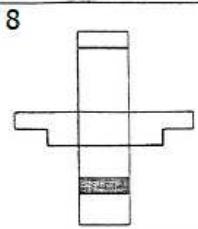
XVIII) Exercice 18 : Coupe brisée

Cocher dans le tableau la bonne représentation.

1	2	3	4



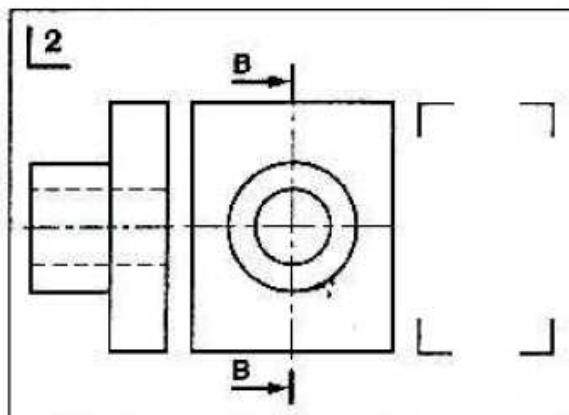
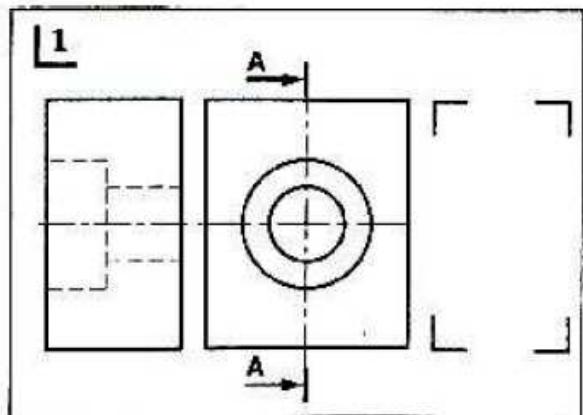
XIX) Exercice 19 : Représentation spatiale & développée



XX) EXERCICE 20

Pour chaque exercice, tracer la vue coupée manquante. Utiliser le plan de coupe indiqué.

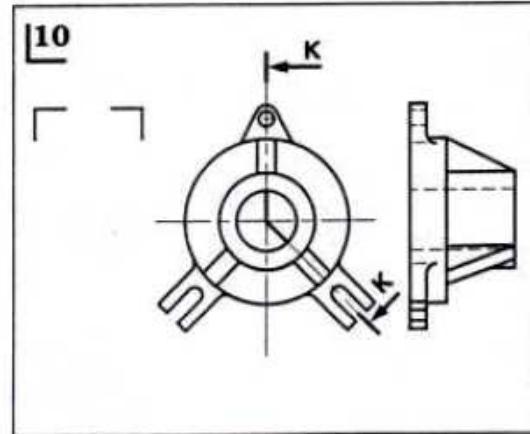
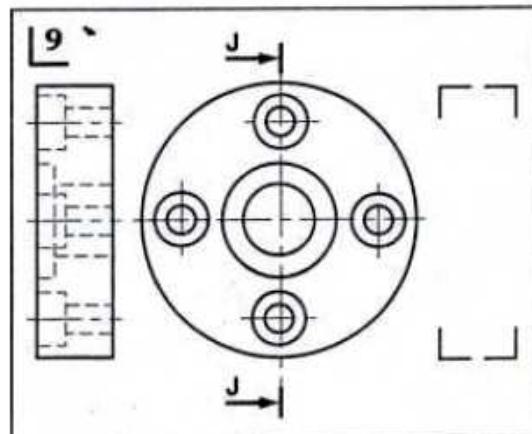
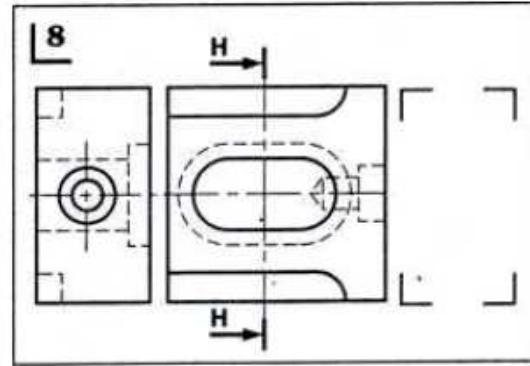
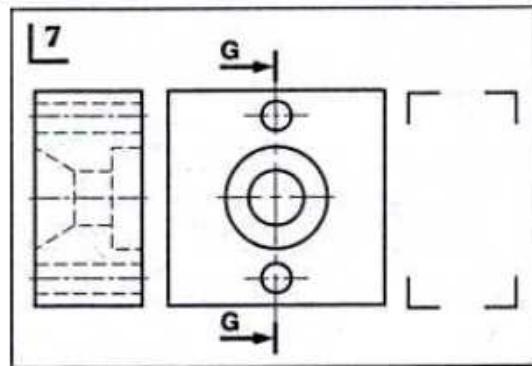
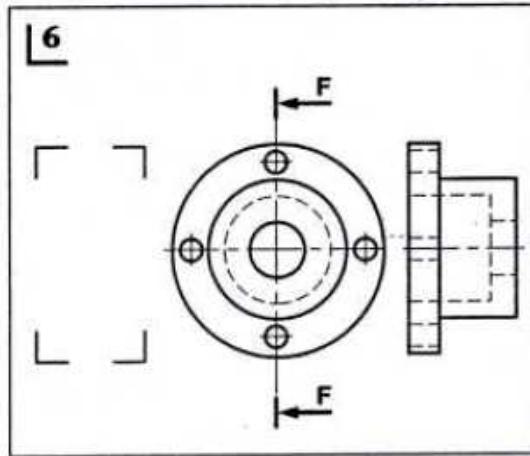
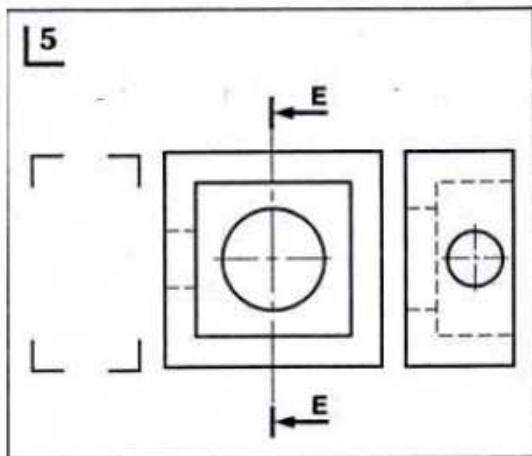
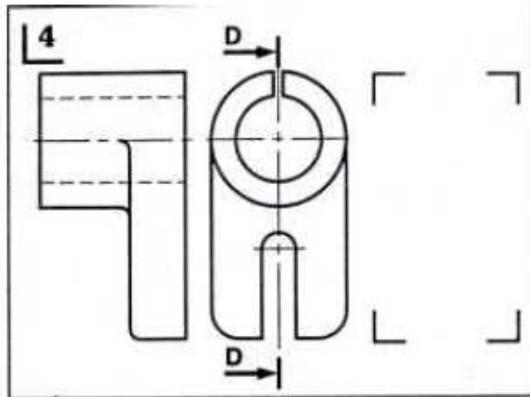
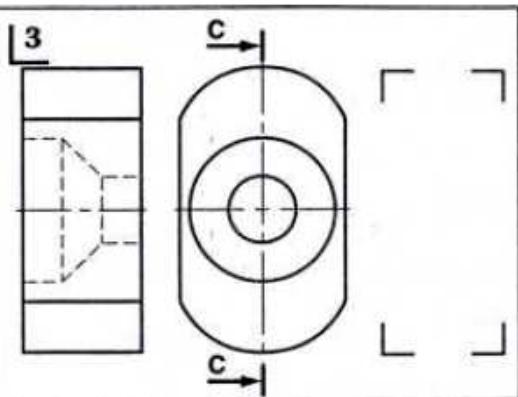
Exercices 1-2-4-5-7-11-13-14-15 :faire une coupe classique.

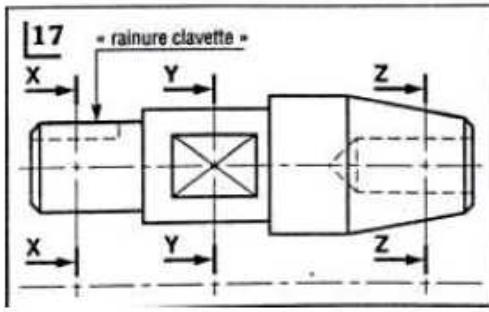
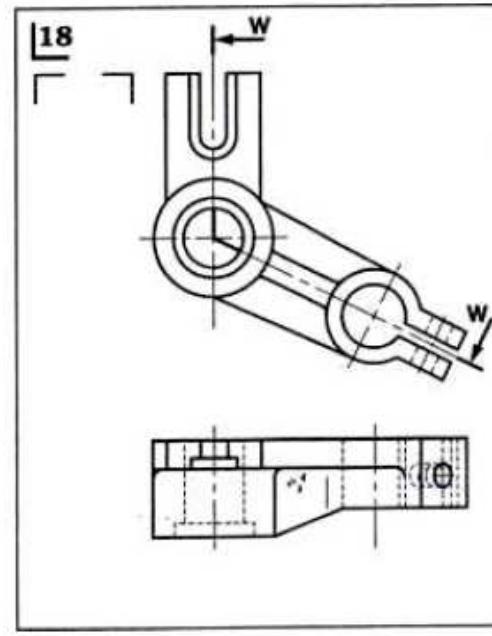
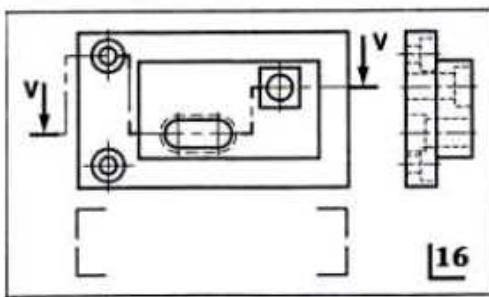
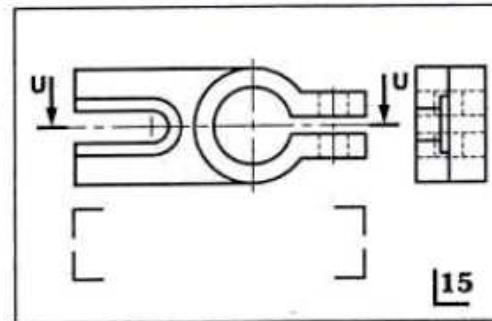
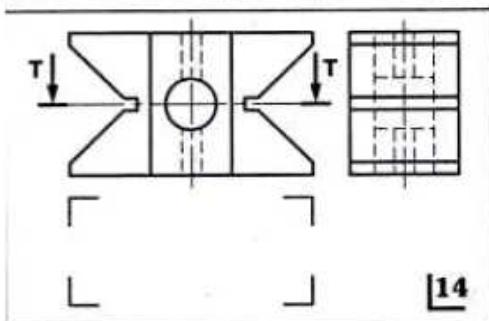
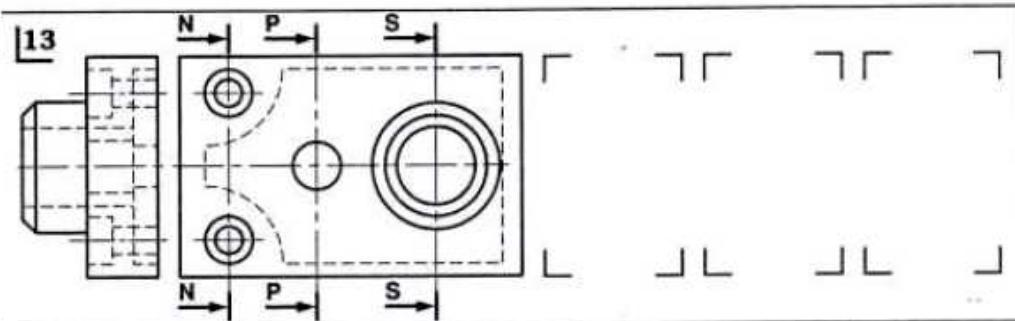
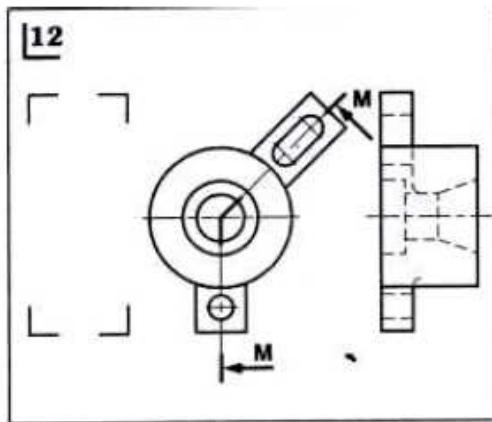
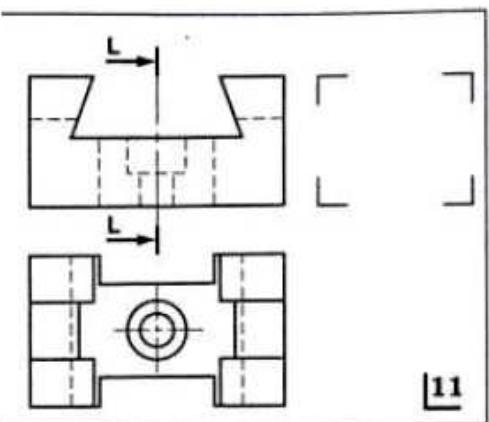


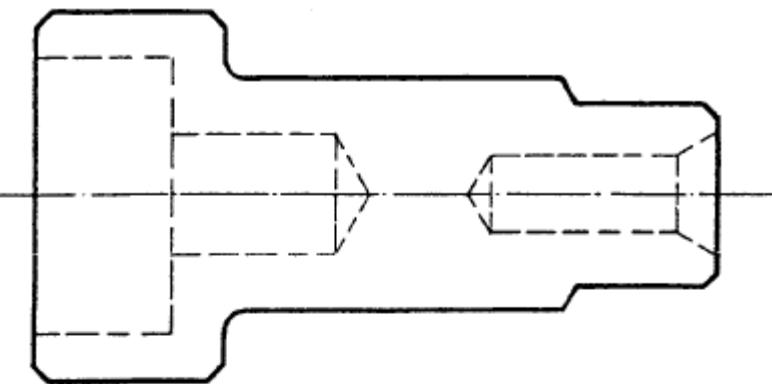
Exercices 3-6-9 :faire une demi-coupe.

Exercices 10-12-16-18 :faire une coupe brisée.

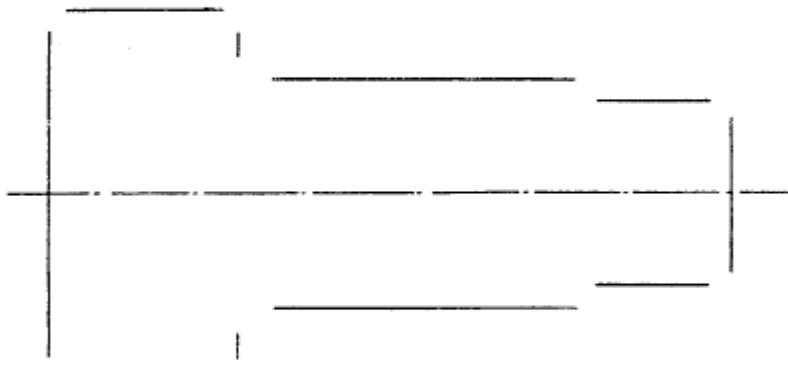
Exercice 17 : faire les section sorties.



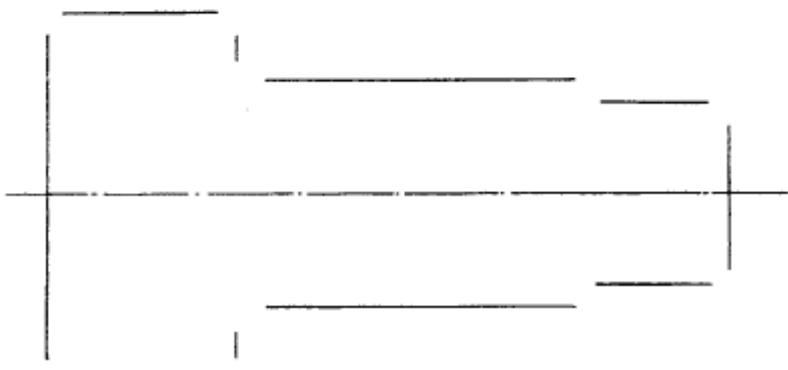


XXI) EXERCICE 21

Complétez le dessin.



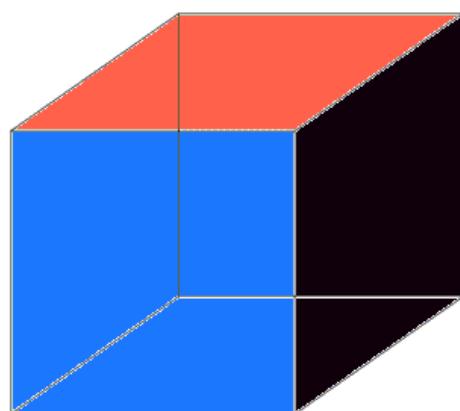
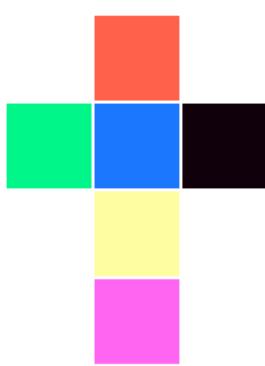
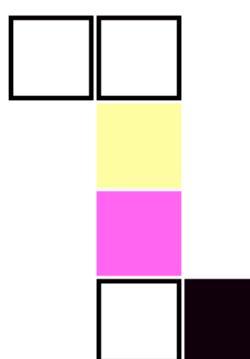
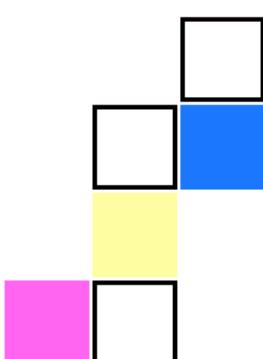
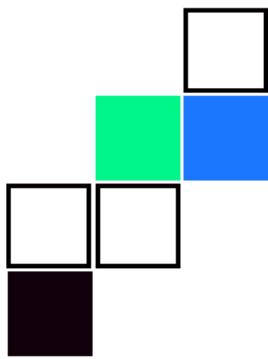
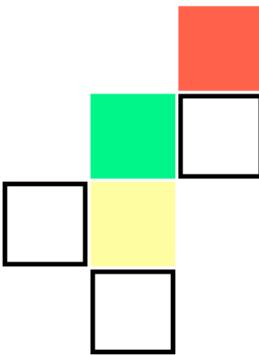
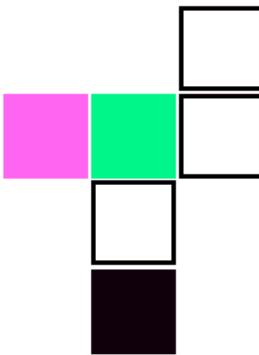
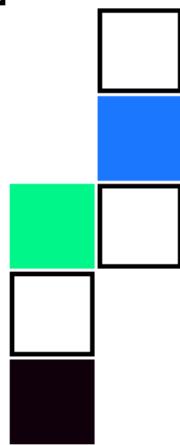
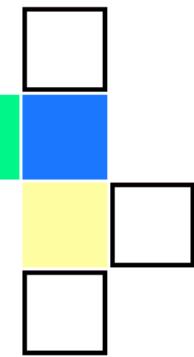
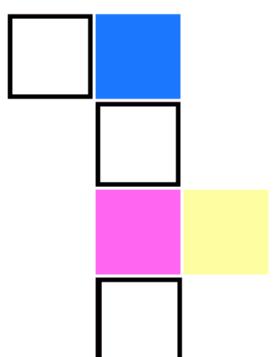
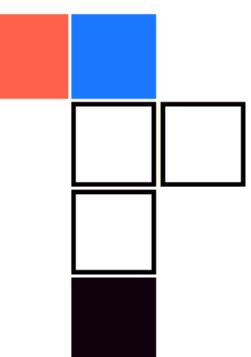
Exécutez une
représentation en coupe
totale.



Exécutez une
représentation avec
coupe locale (partie
gauche).

XXII) EXERCICE 22

A partir du modèle du bas et de la représentation 3D , remplir les cases de chaque patron de cube avec la bonne couleur



XXIII) EXERCICE 23

Réaliser les coupes & sections A-A pour les pièces suivantes

