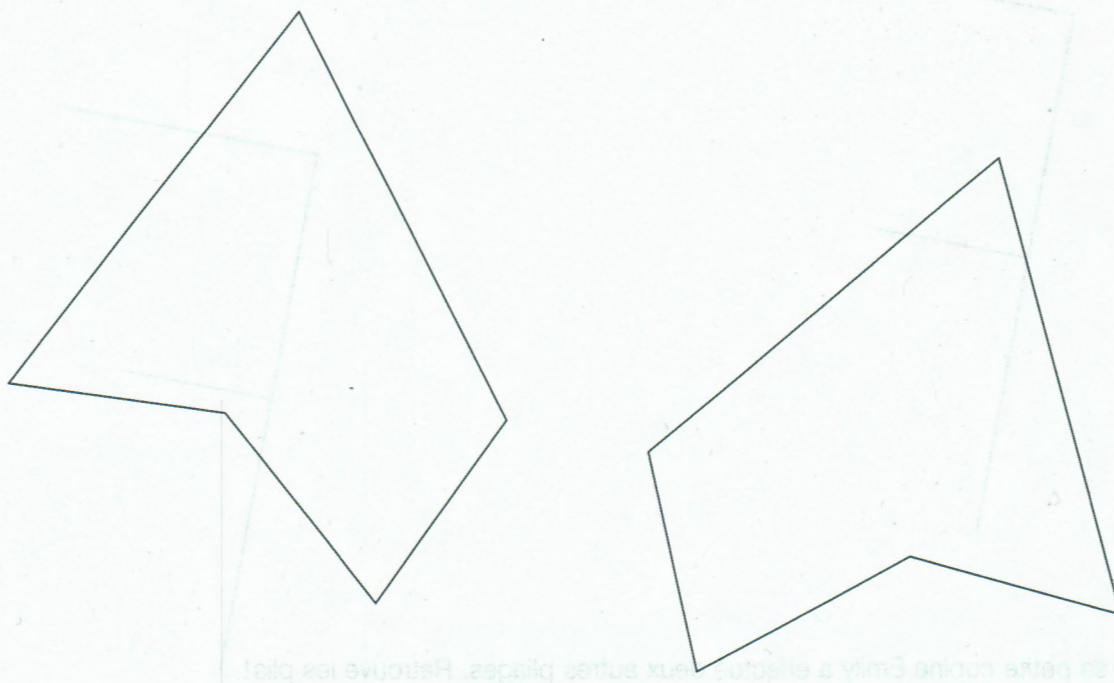


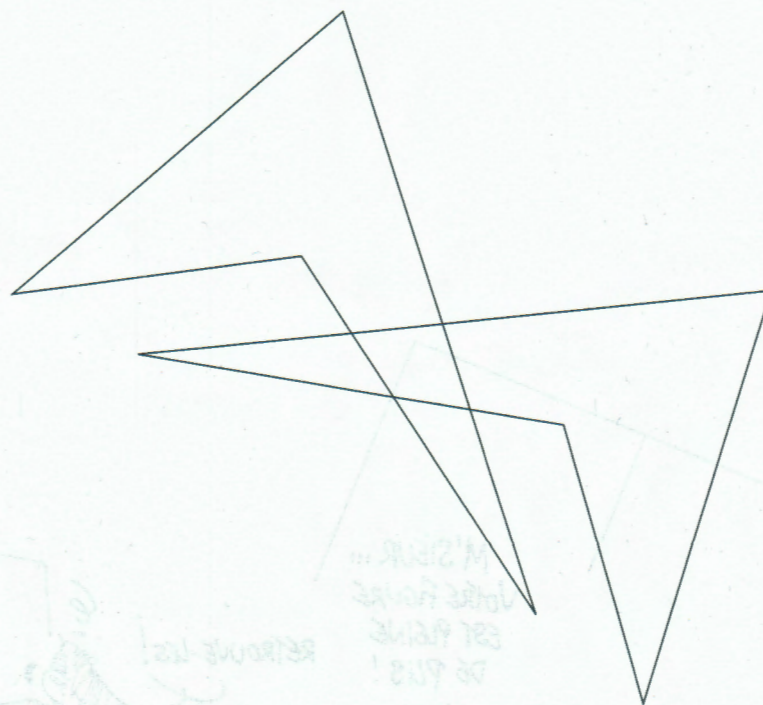
Report

Sans effectuer de pliage, trace à main levée l'axe de la symétrie faisant correspondre une figure à l'autre.
Vérifie ensuite si ton axe est bien placé.

a)



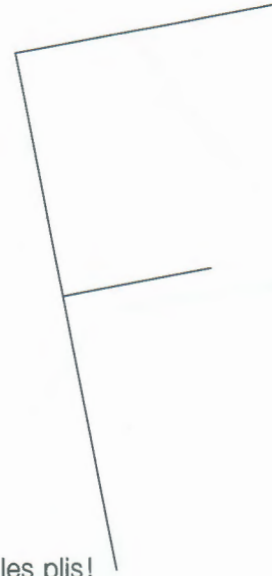
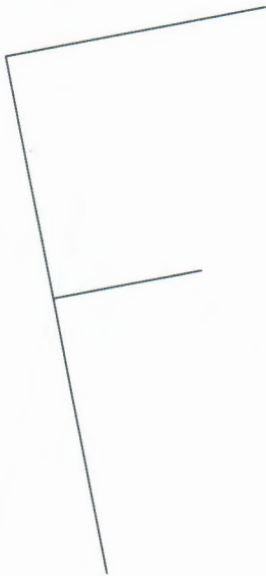
b)



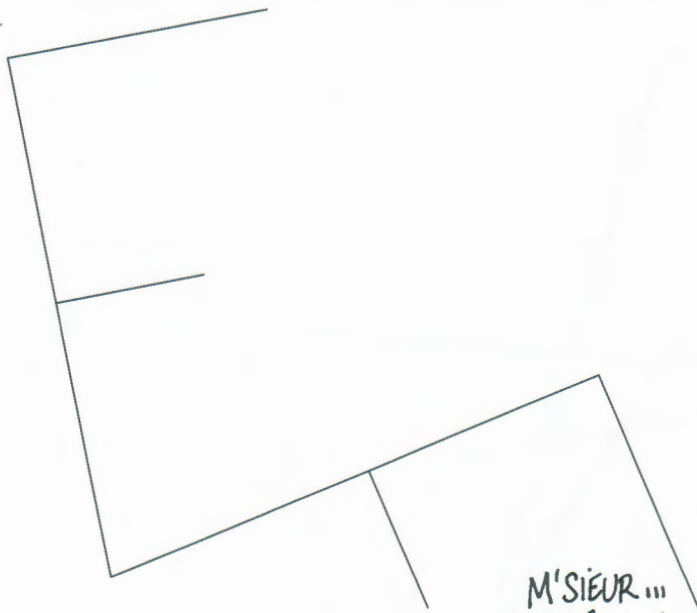
Avec deux plis

a) Pour obtenir la figure de droite, Roger a plié deux fois son papier calque.

A l'aide d'un autre papier calque, retrouve ses plis et compare ta proposition à celles de tes camarades.



b) Ici, sa petite copine Emily a effectué deux autres pliages. Retrouve les plis!



M'SIEUR !!!
VOTRE FIGURE
EST PLEINE
DE PLS !

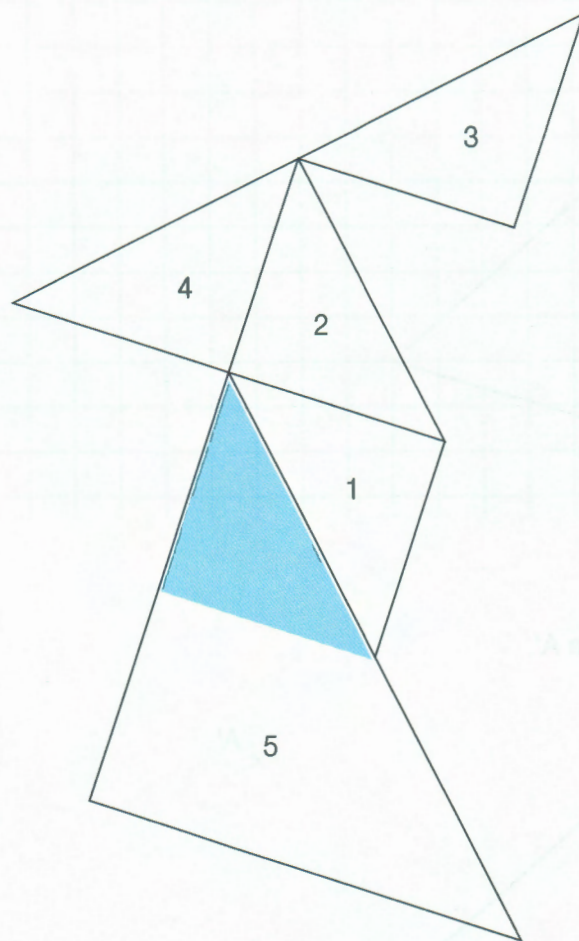
RETROUVE-LES!



Circuit

On a procédé en quatre étapes pour amener la figure bleue à la position n° 4.

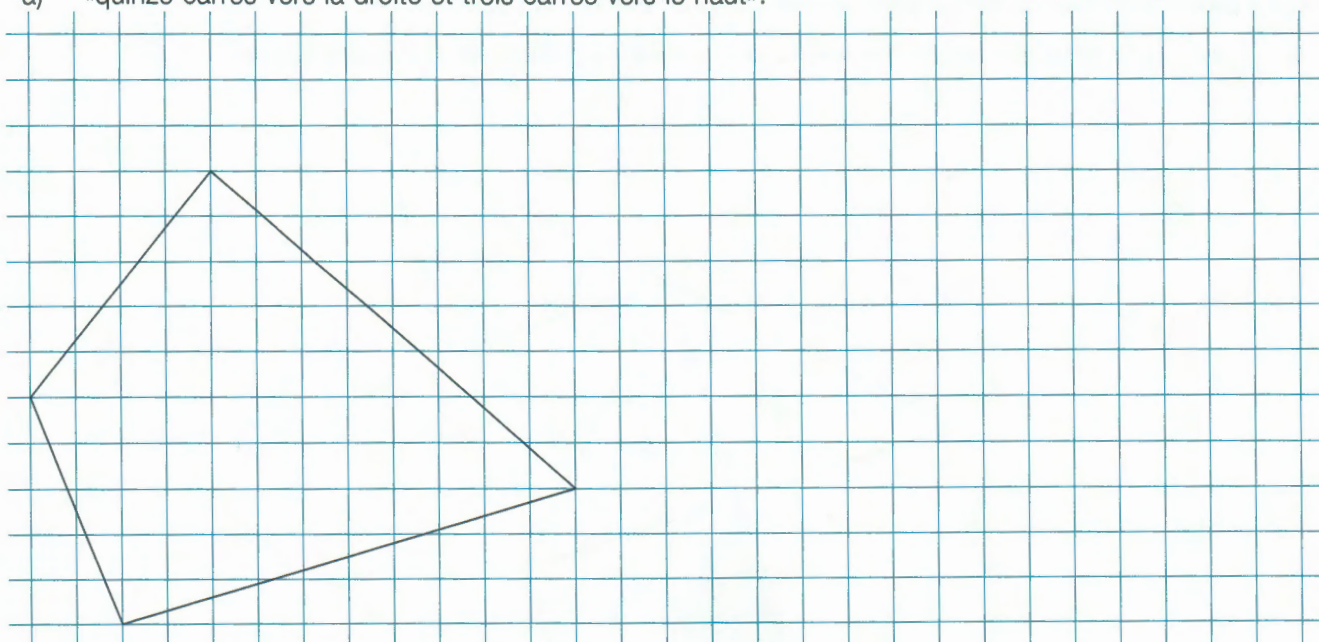
a) Quels sont les mouvements successifs qui permettent d'effectuer ces déplacements ?



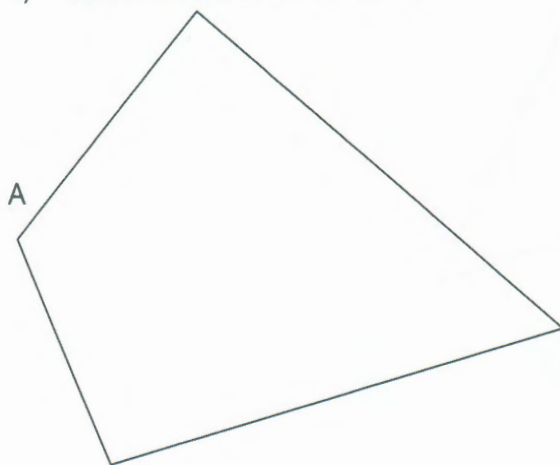
- b) Quel mouvement amène la figure n° 4 sur la figure bleue ?
c) Comment passer du triangle bleu au triangle n° 5 ?

Effectue trois translations :

a) «quinze carrés vers la droite et trois carrés vers le haut».

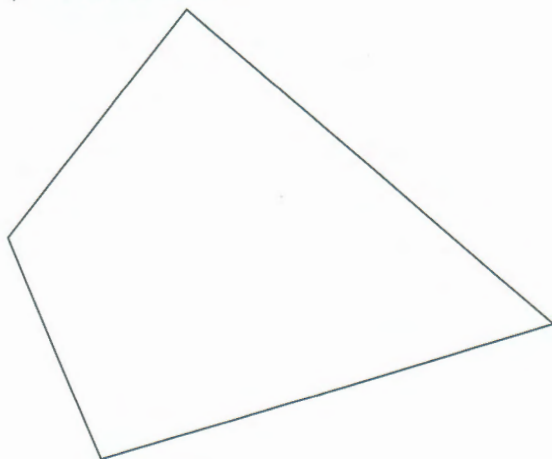


b) La translation amène A en A'.



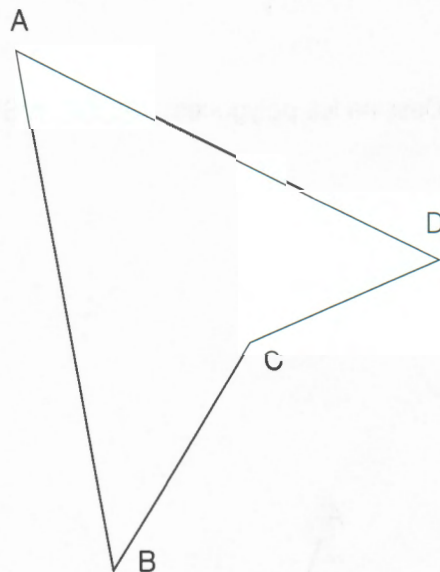
x A'

c) selon la flèche

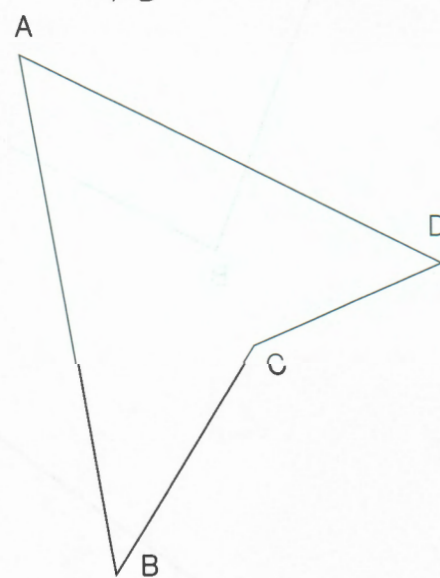


Construis de trois façons différentes l'image $A'B'C'D'$ du quadrilatère $ABCD$, par une translation qui amène A en A' .

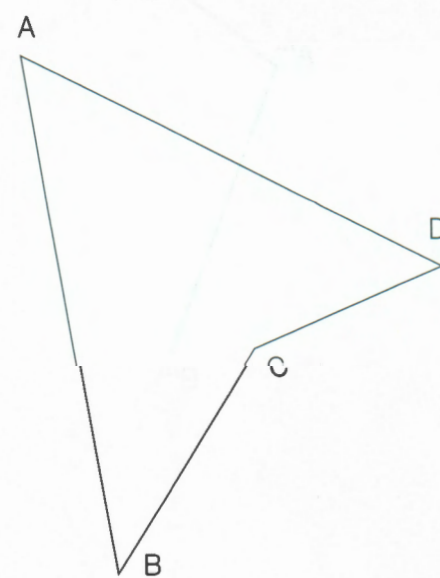
a) A'
×



b) A'
×



c) A'
×



Première translation:

$$A \mapsto A'$$

$$B \mapsto B'$$

...

Deuxième translation:

$$A' \mapsto A''$$

$$B' \mapsto B''$$

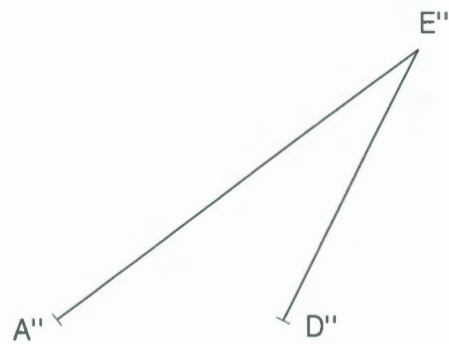
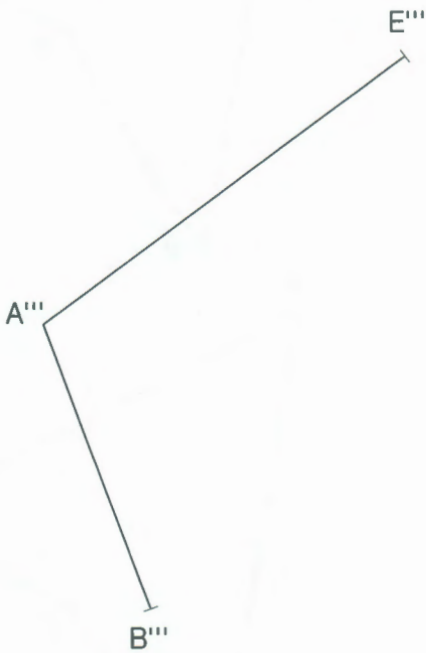
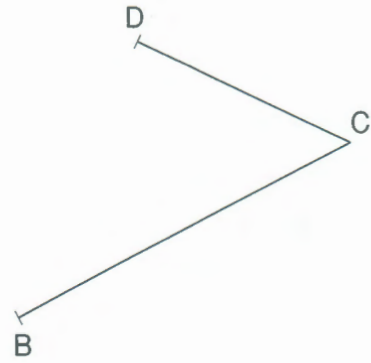
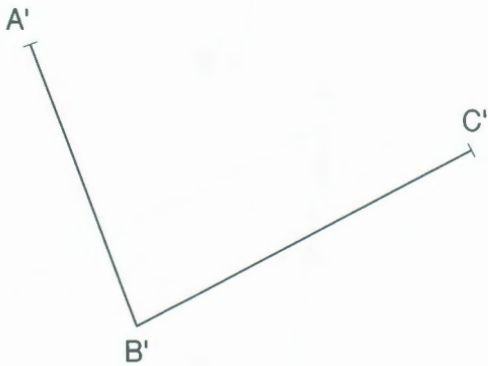
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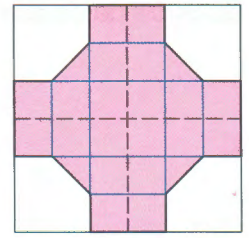
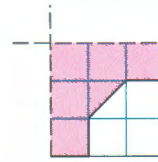
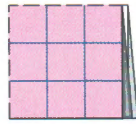
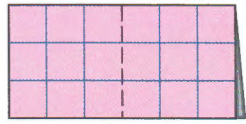
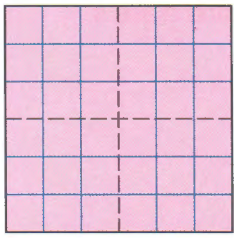
Troisième translation:

$$A'' \mapsto A'''$$

$$B'' \mapsto B'''$$

...

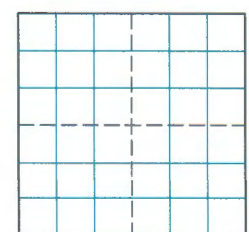
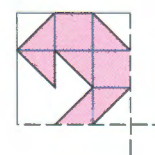
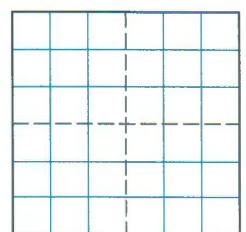
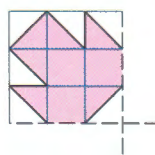
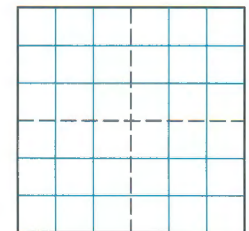
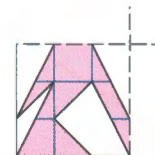
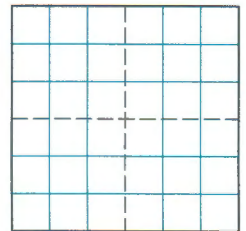
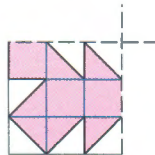
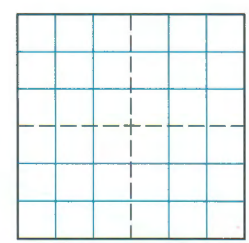
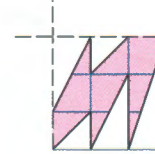
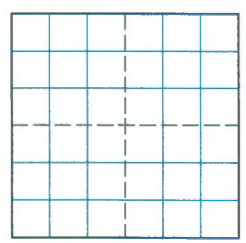
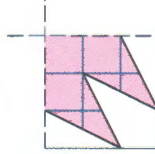
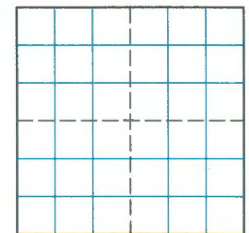
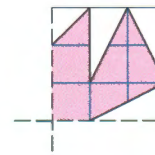
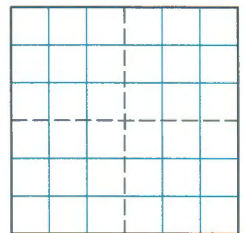
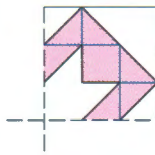
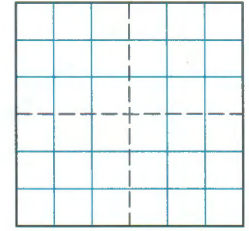
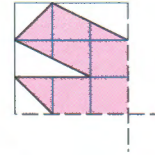
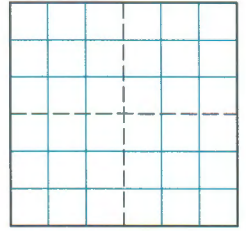
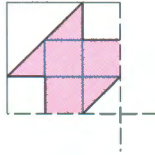
Dessine les polygones: $ABCDE$, $A'B'C'D'E'$, $A''B''C''D''E''$ et $A'''B'''C'''D'''E'''$.



On plie deux fois le carré ci-dessus.

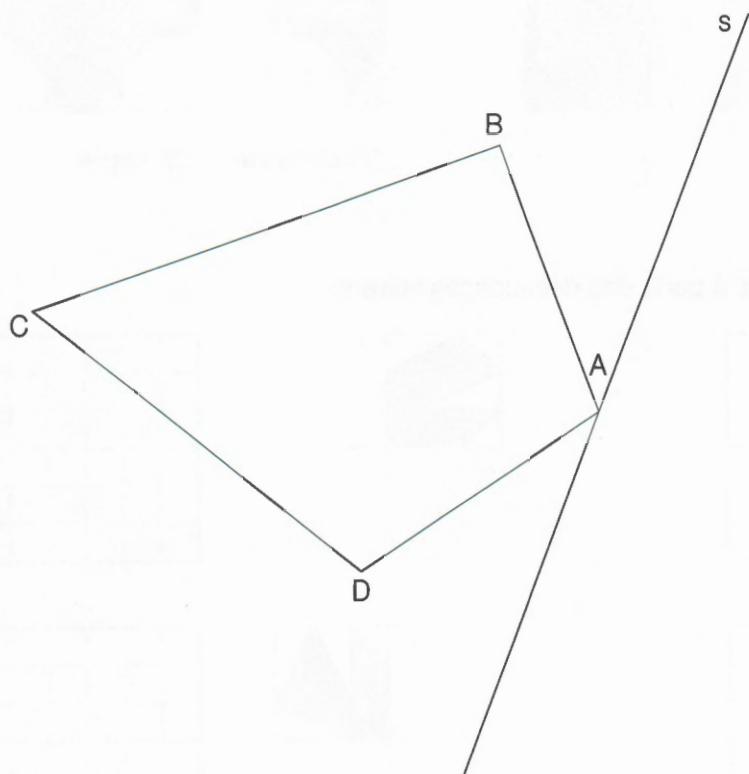
On découpe. On déplie.

Dessine les figures dépliées que tu obtiens à partir des découpages suivants :

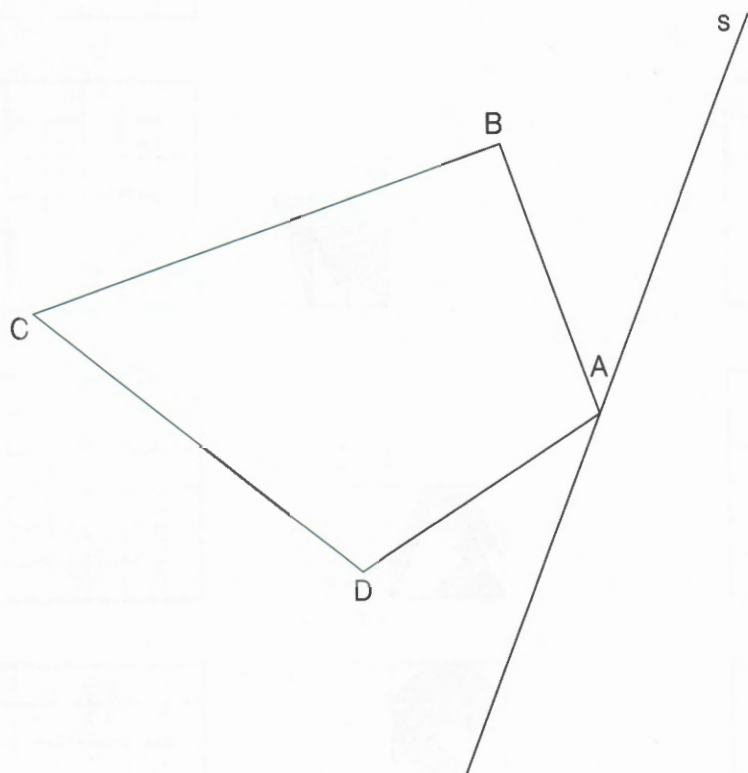


Construis de deux façons différentes l'image $A'B'C'D'$ du quadrilatère $ABCD$, par une symétrie d'axe s .

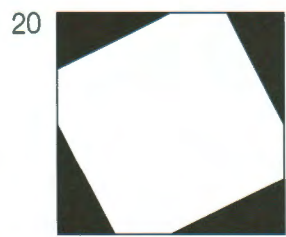
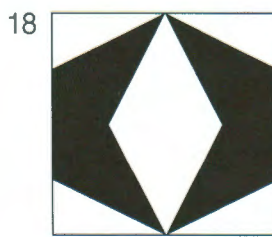
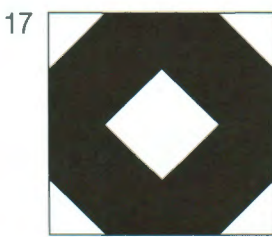
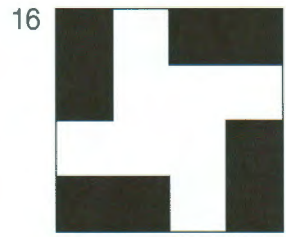
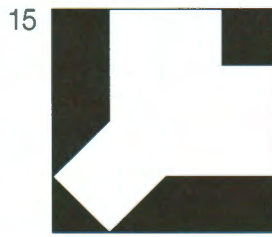
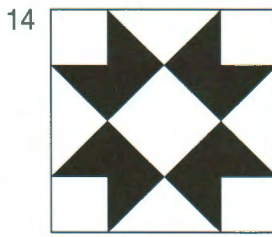
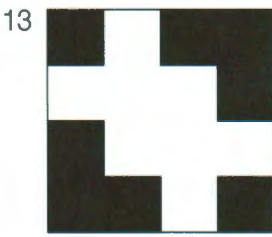
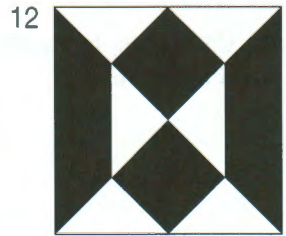
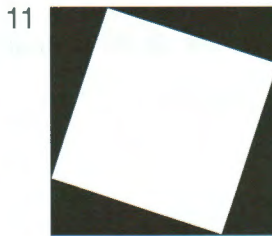
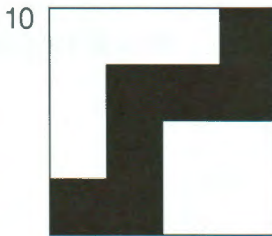
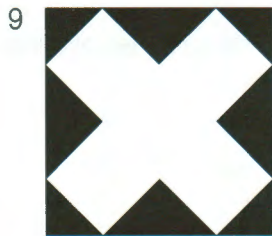
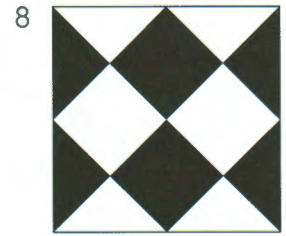
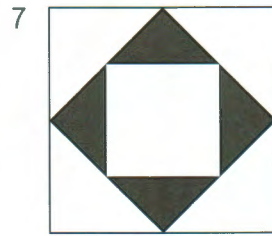
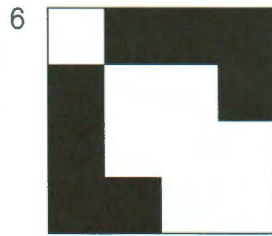
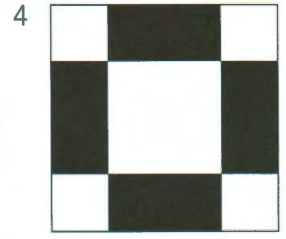
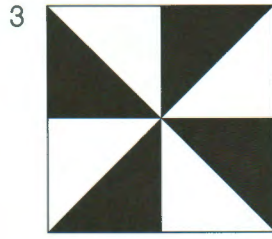
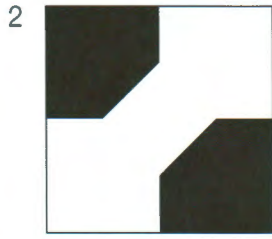
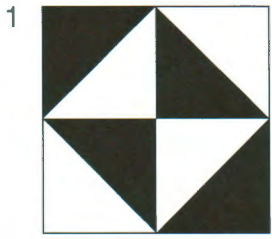
a)



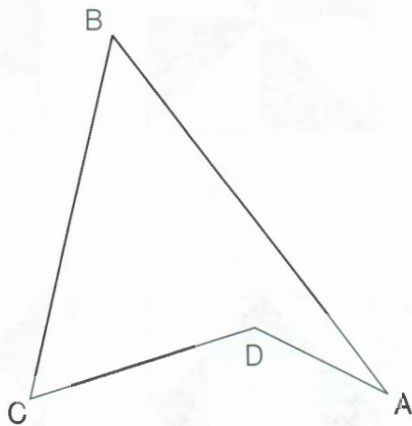
b)



Recherche les axes de symétrie de ces figures et trace-les en rouge. Vérifie tes solutions avec ton voisin.

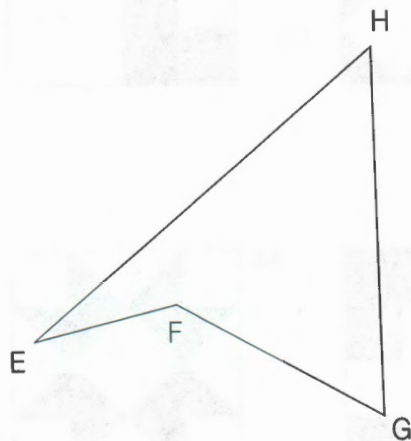


- a) B' est l'image de B , par une rotation de centre A .
Construis la figure $A'B'C'$.

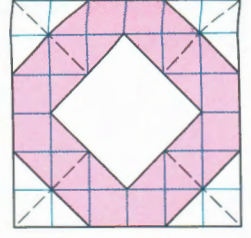
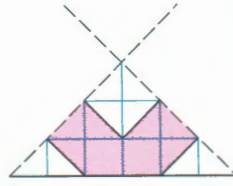
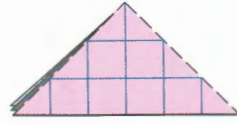
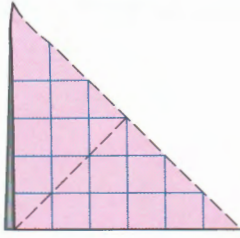
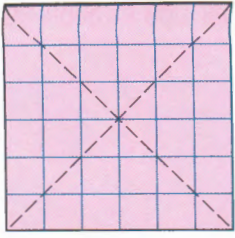


$\times B'$

- b) Cette fois, la figure doit tourner de 90° autour du point O , dans le sens inverse de celui des aiguilles d'une montre.



$O \times$

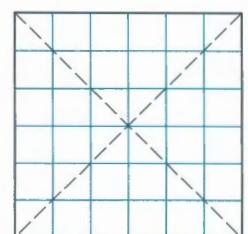
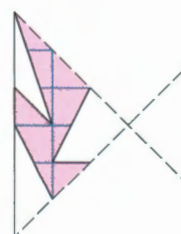
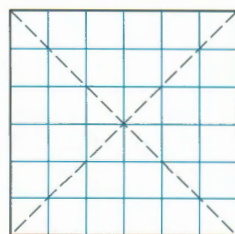
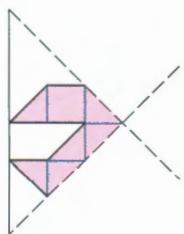
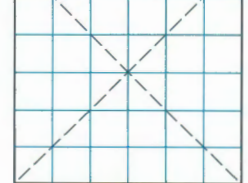
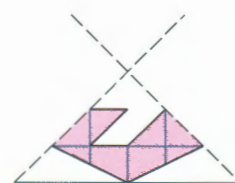
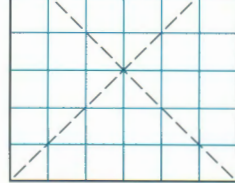
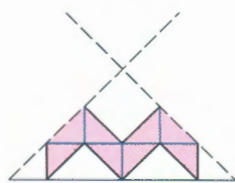
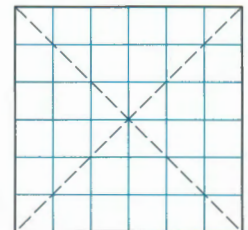
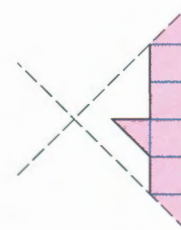
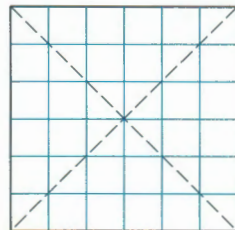
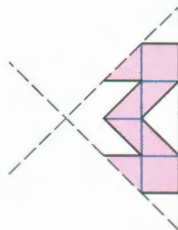
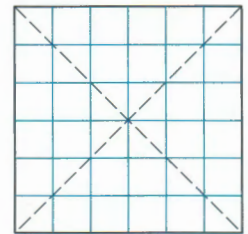
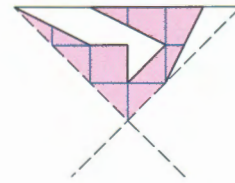
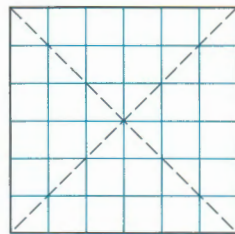
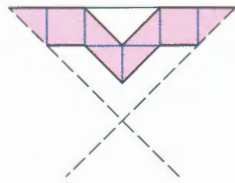
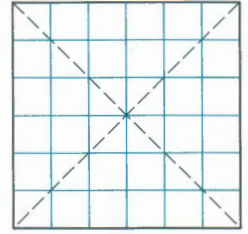
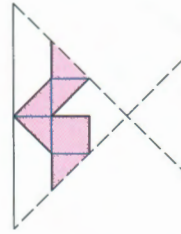
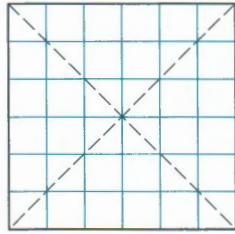
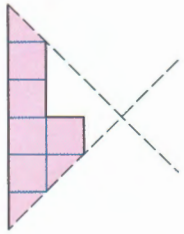


On plie deux fois le carré ci-dessus.

On découpe.

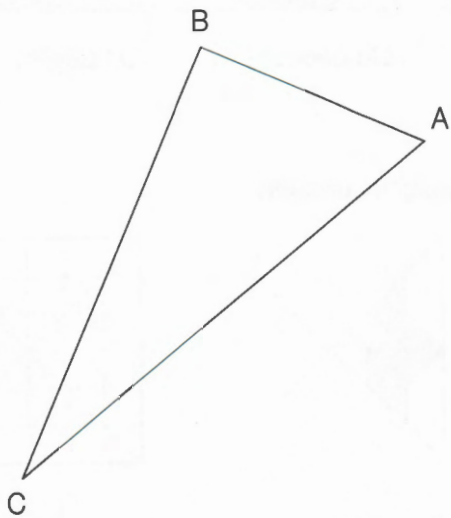
On déplie.

Dessine les figures dépliées que tu obtiens à partir des découpages suivants :



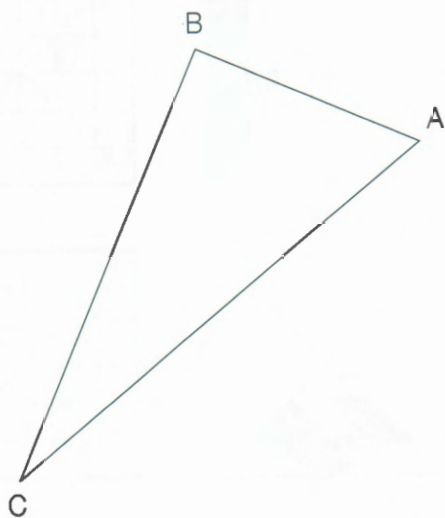
Construis de deux façons différentes l'image $A'B'C'$ obtenue à partir du triangle ABC , par une rotation de centre O .

a)

O
x

x C'

b)

O
x

x C'

- Effectue ces déplacements en suivant les lignes du réseau :
1. $ABCD \mapsto A'B'C'D'$
 2. $ABCD \mapsto A''B''C''D''$
 3. $ABCD \mapsto A'''B'''C'''D'''$

