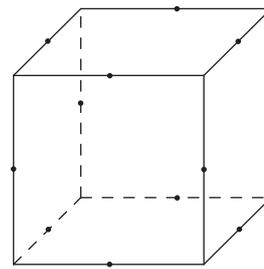
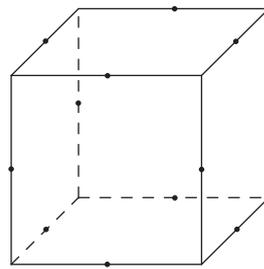
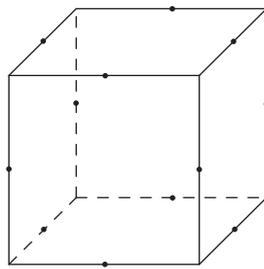
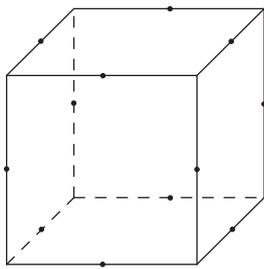
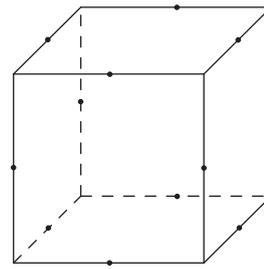
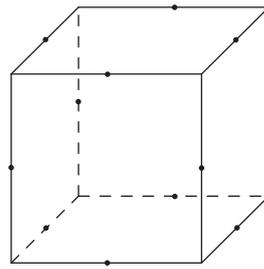
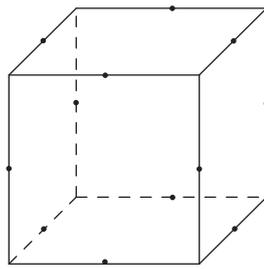
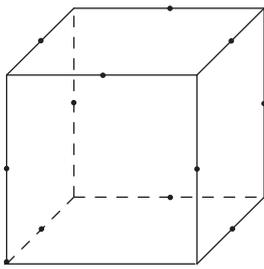
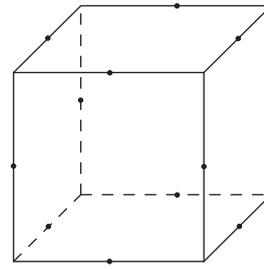
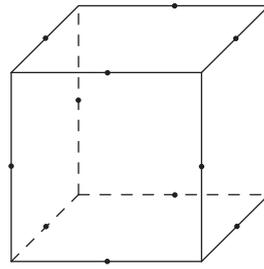
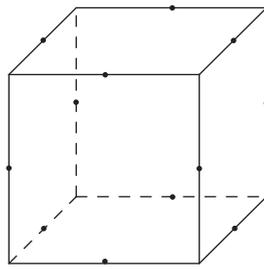
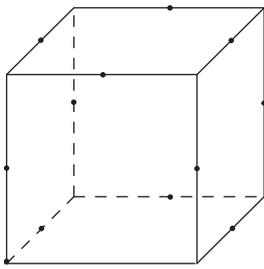
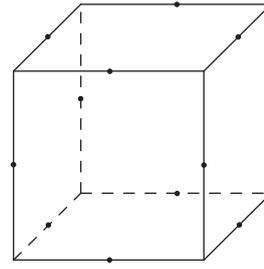
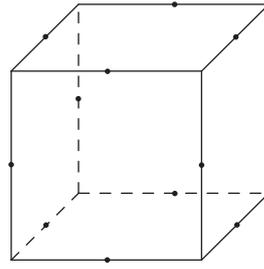
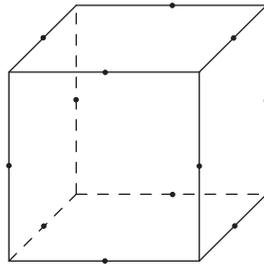
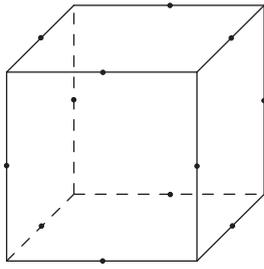
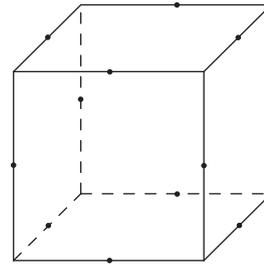
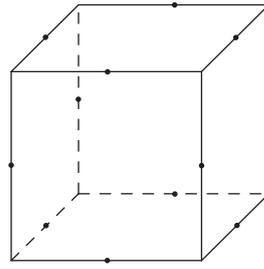
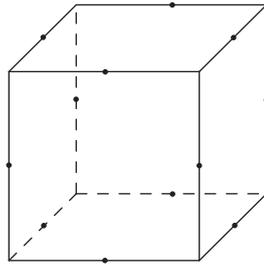
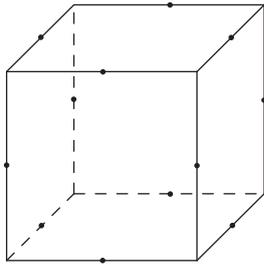
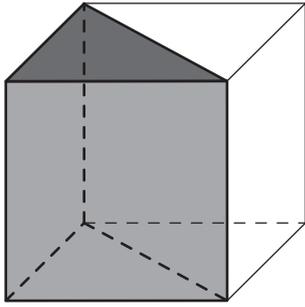


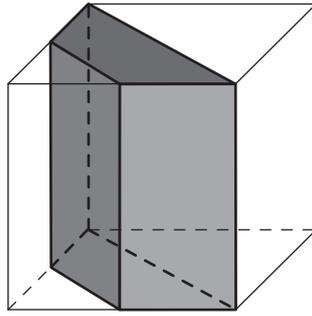
Feuille de travail



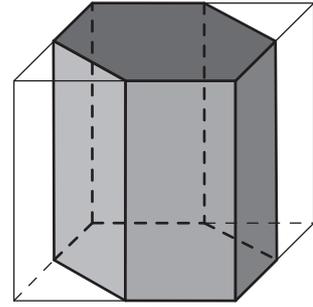
Un intrus chez les prismes



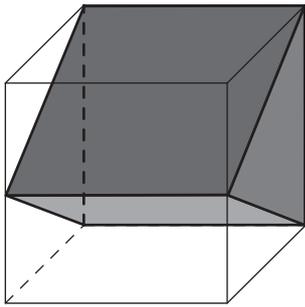
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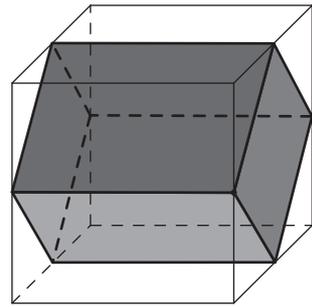
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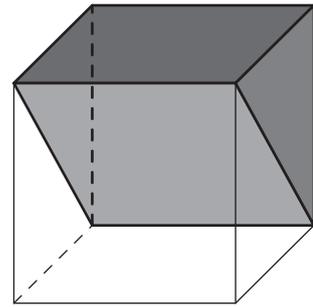
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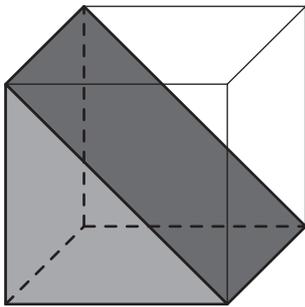
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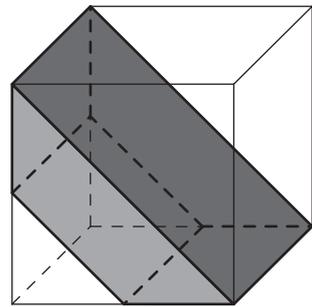
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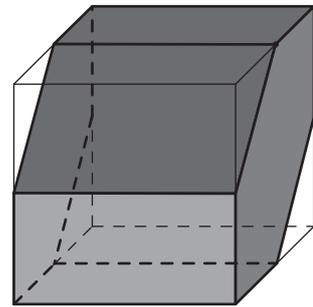
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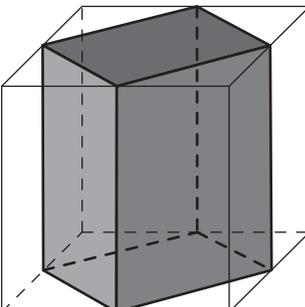
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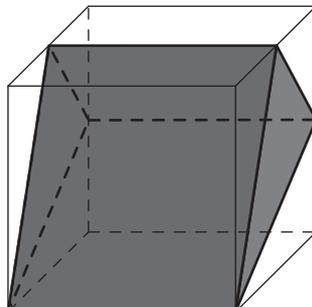
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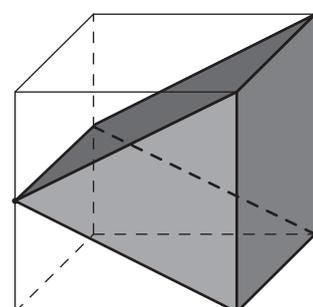
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10



11

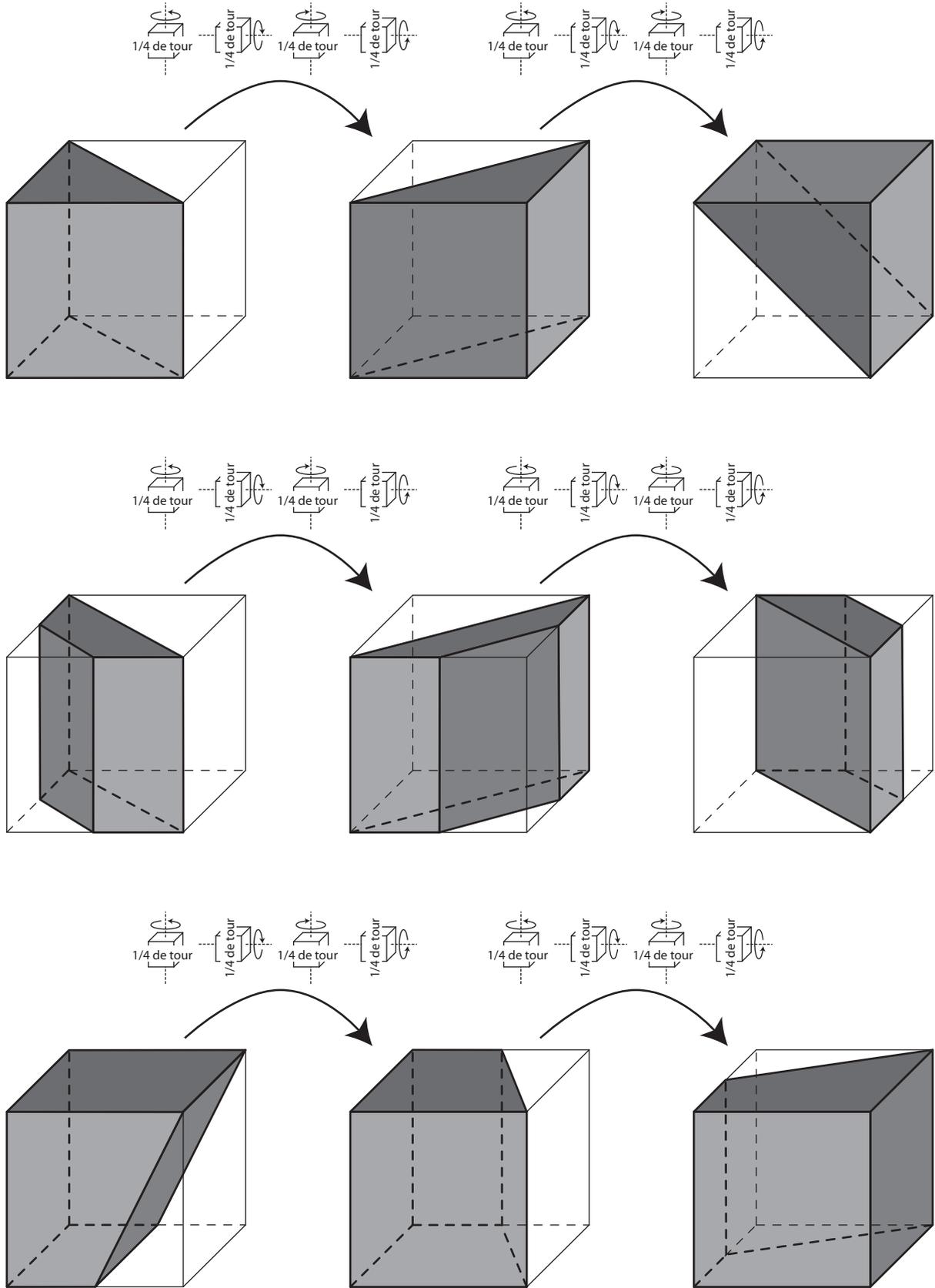


12

Associe les différentes représentations d'un même prisme.
Un seul est représenté une seule fois. Sauras-tu le trouver?

(les représentations sont tracées en perspective cavalière)

Des prismes qui tournent /1



Entoure la rotation qui a permis de passer d'un prisme à l'autre.

Des prismes qui tournent /2

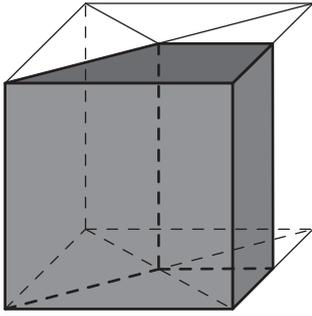
The diagram illustrates the process of rotating various prisms. It is organized into four rows, each containing four stages of a prism's rotation:

- Row 1:** A rectangular prism with a shaded top face. A rotation symbol above the first transition indicates a 1/4 turn around a vertical axis.
- Row 2:** A rectangular prism with a shaded front face. A rotation symbol above the first transition indicates a 1/4 turn around a horizontal axis.
- Row 3:** A rectangular prism with a shaded back face. A rotation symbol above the first transition indicates a 1/4 turn around a horizontal axis.
- Row 4:** A rectangular prism with a shaded bottom face. A rotation symbol above the first transition indicates a 1/4 turn around a vertical axis.

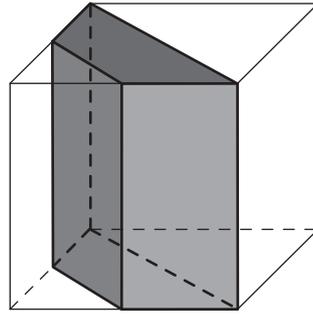
In each row, the first image is a shaded 3D representation of the prism. The second image is a wireframe representation of the same prism. The third and fourth images are wireframe representations of the prism after a 1/4 turn rotation, as indicated by the rotation symbols above the arrows connecting the stages.

Trace en perspective cavalière les prismes, après leur avoir appliqué la rotation indiquée.

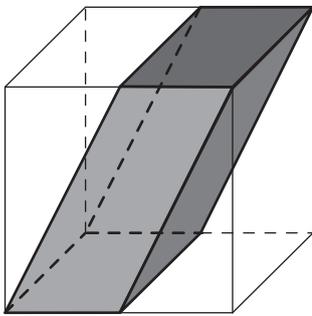
Des prismes et des patrons



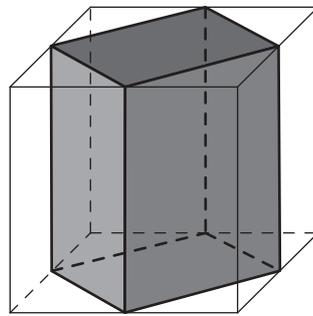
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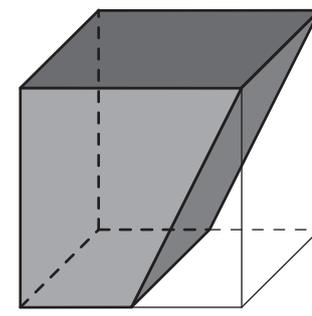
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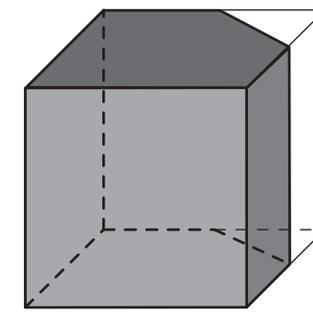
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4



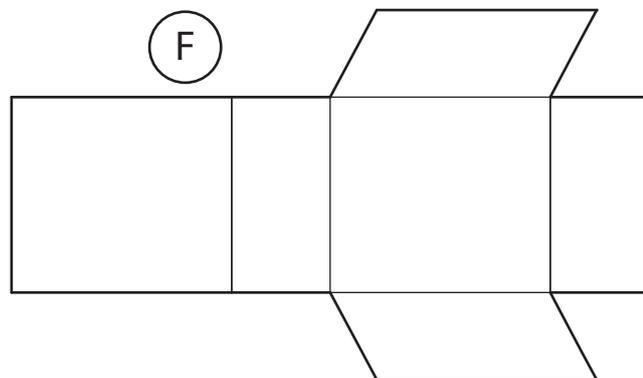
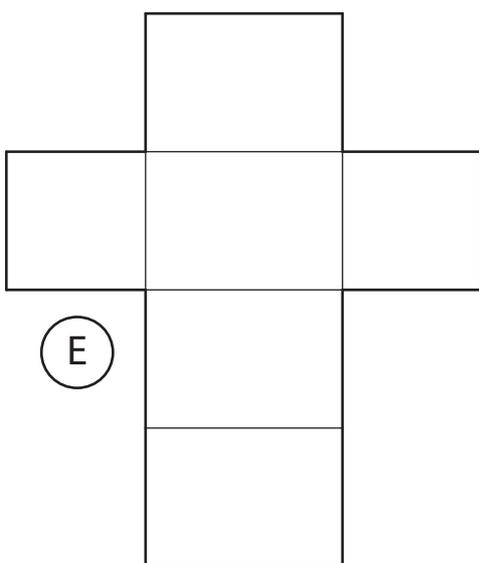
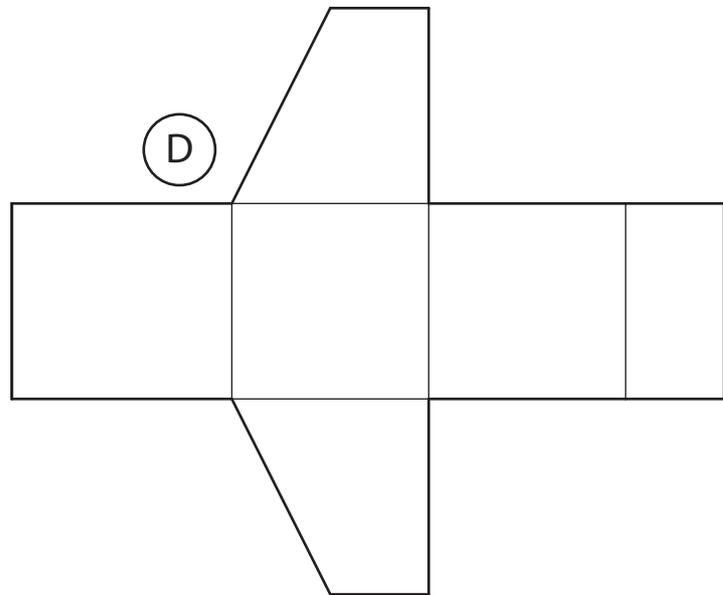
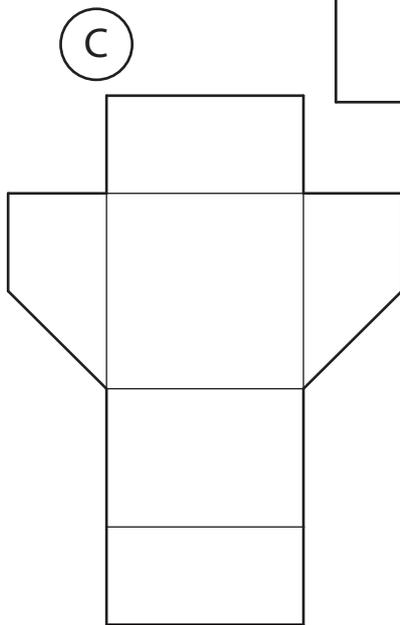
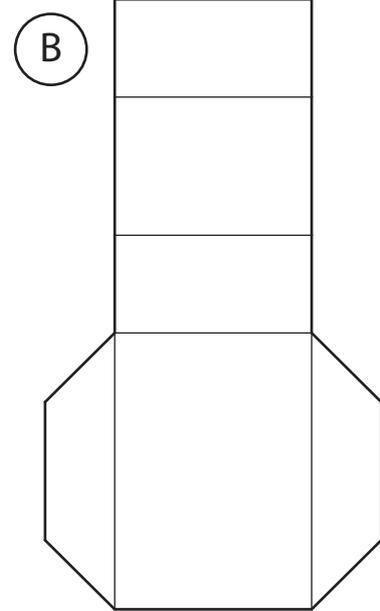
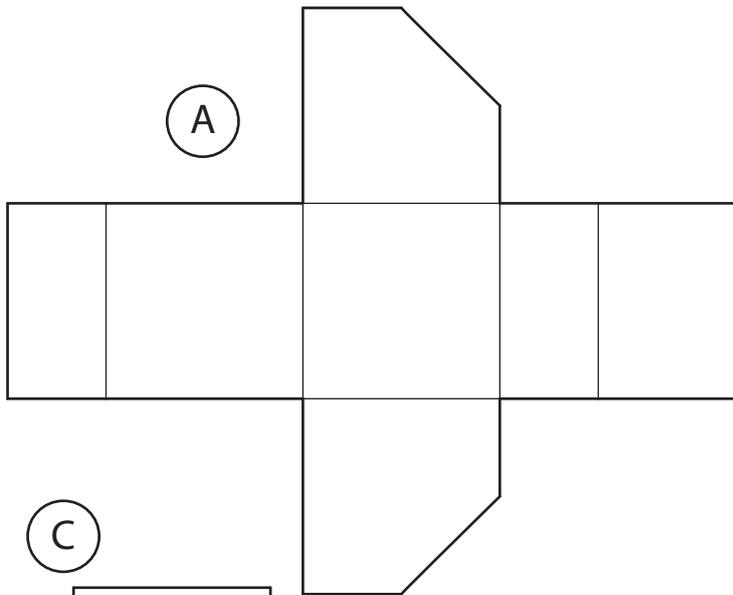
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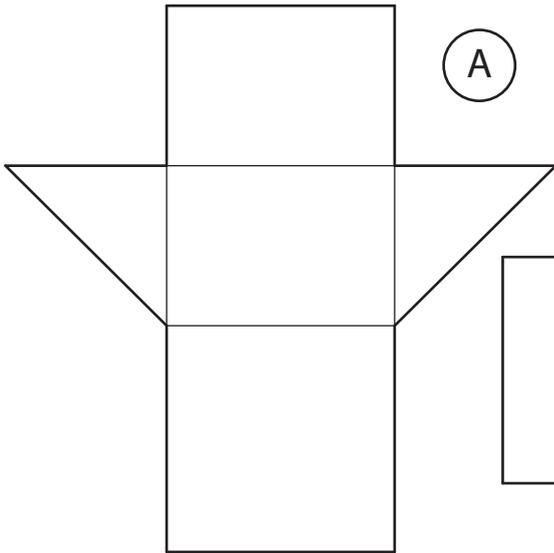
Associe à chaque prisme, ...

Des prismes et des patrons

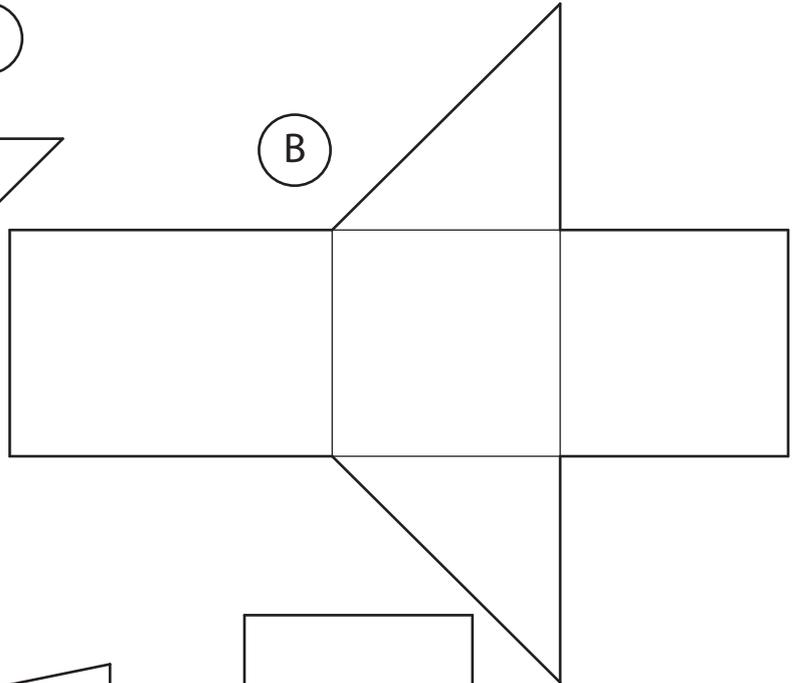


... son patron
(les patrons ne sont pas en vraie grandeur)

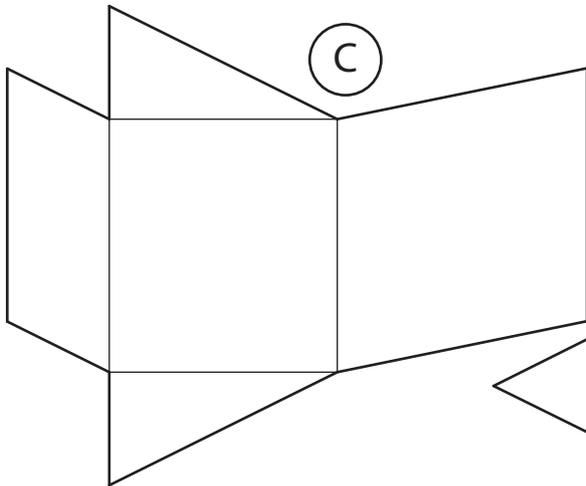
Des patrons et des prismes



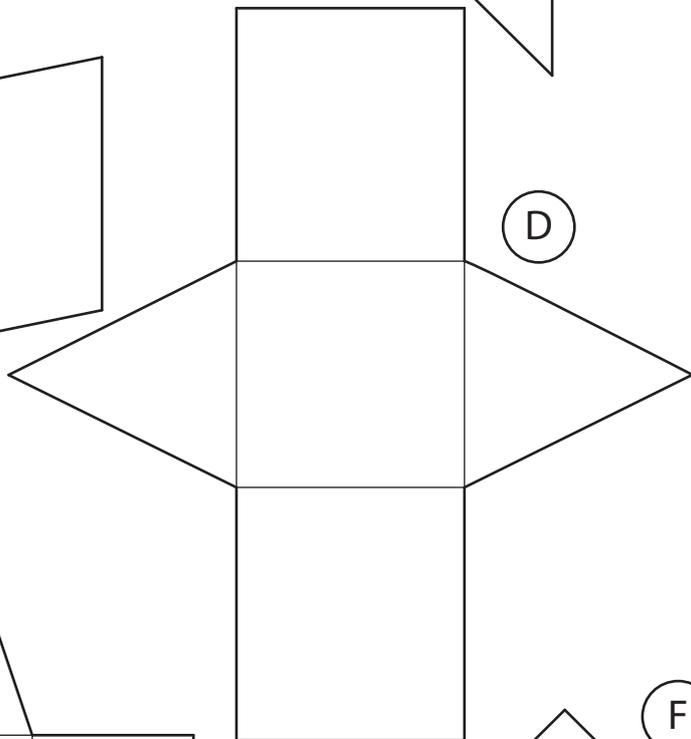
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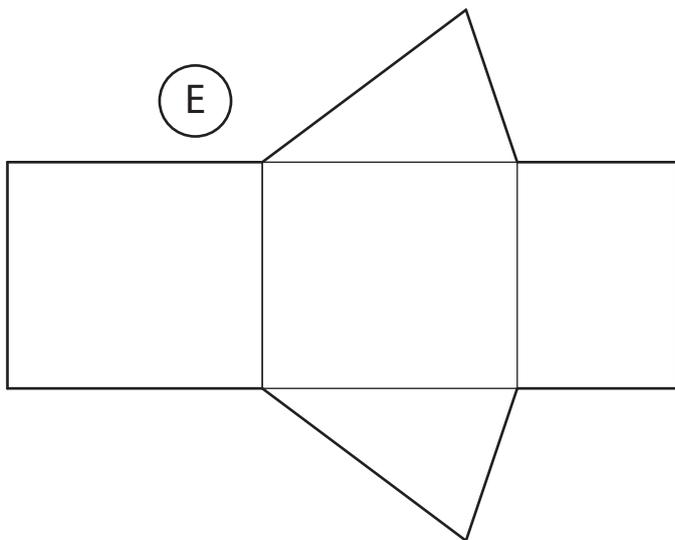
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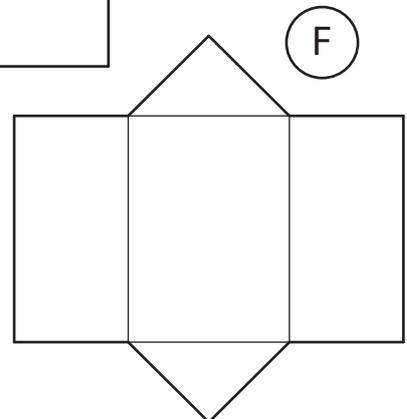
C



D



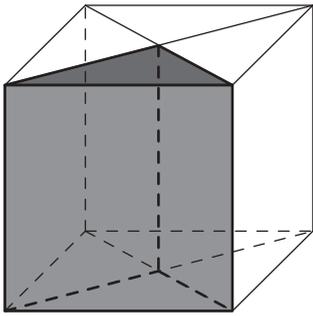
E



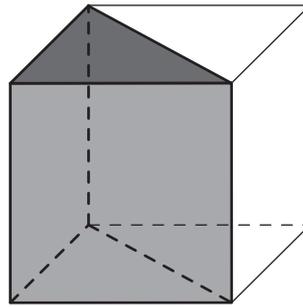
F

Associe à chaque patron, ...

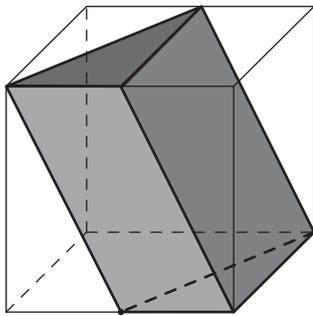
Des patrons et des prismes



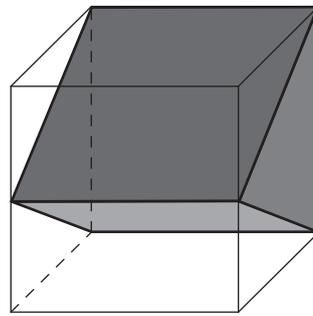
①



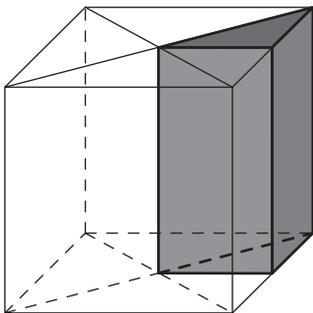
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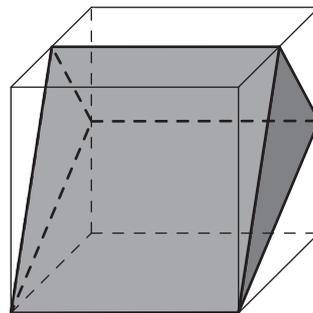
③



④



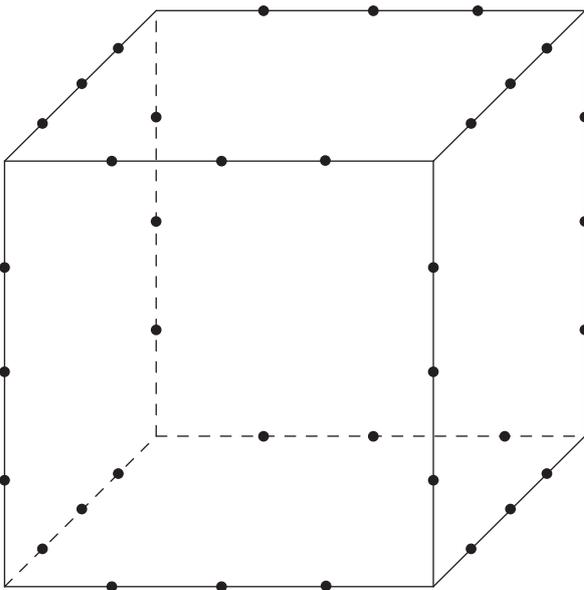
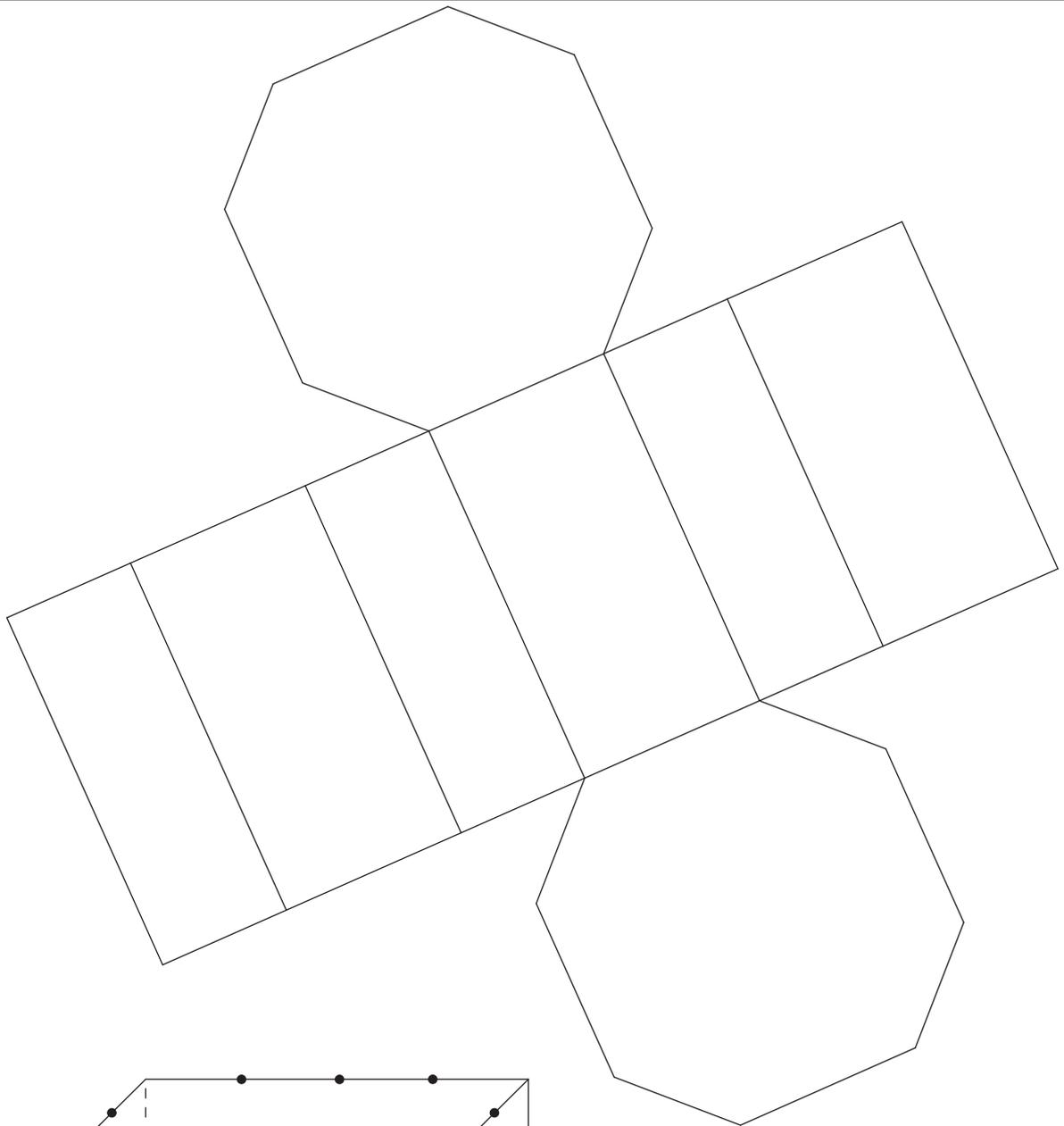
⑤



⑥

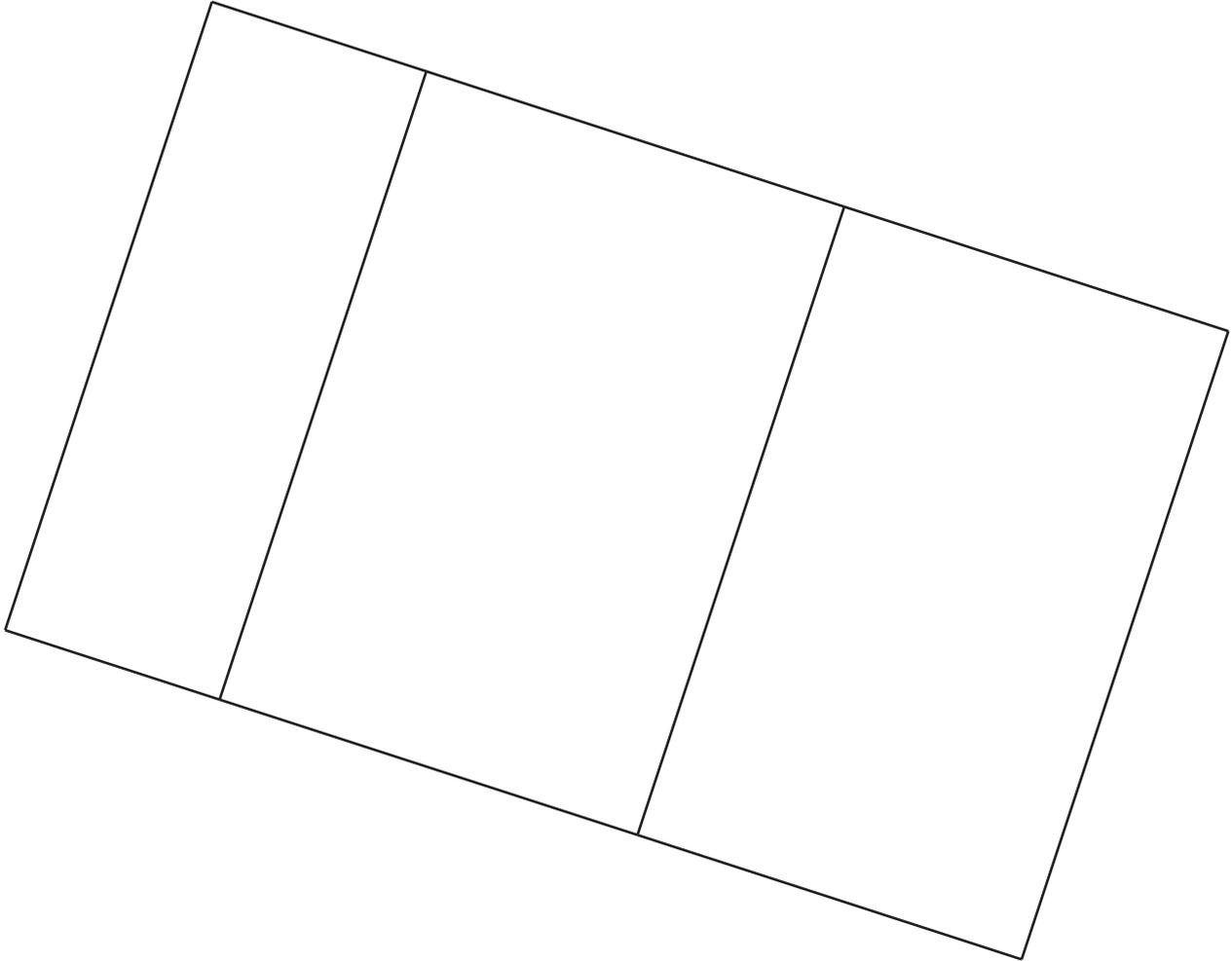
... son prisme.

Du patron au prisme /1



Dessine en perspective cavalière, le prisme dont le patron est donné.
(Chaque arête est partagée en 4 segments de même longueur. Tous les sommets du prisme sont soit des sommets du cube soit l'un des points placés sur les arêtes.)

Les patrons de prismes /1

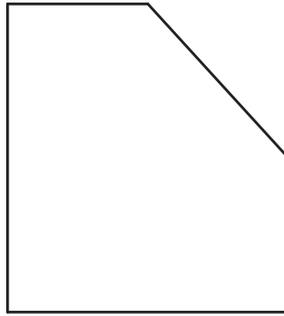


Les faces latérales étant tracées, complète le dessin pour obtenir le patron d'un prisme droit.

Les patrons de prismes /2

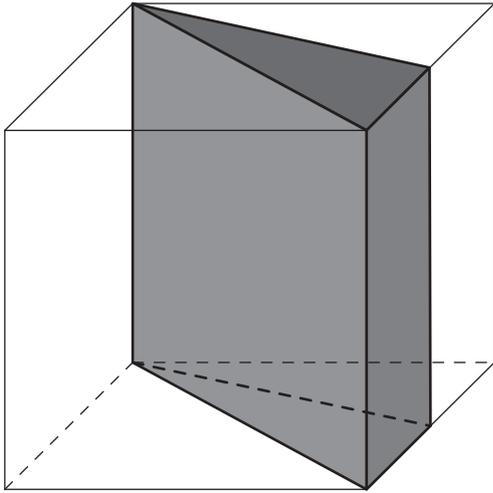


h

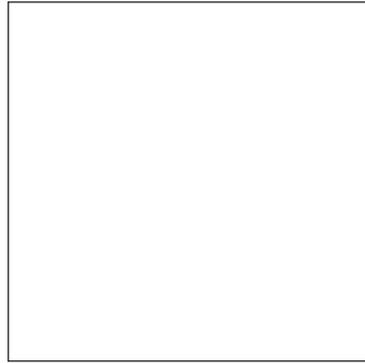


Construis le patron du prisme droit ayant pour base le quadrilatère tracé et pour hauteur h .

Du prisme au patron /1

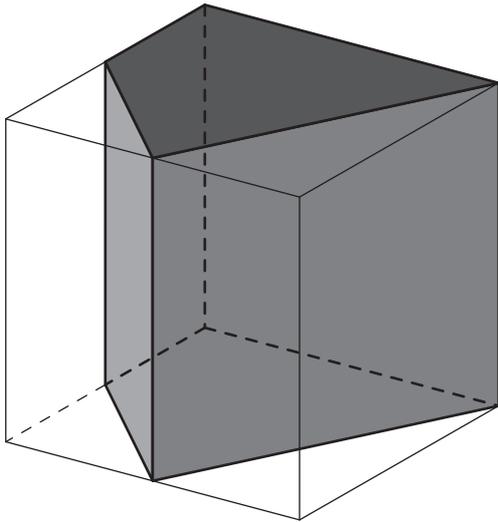


Une face du cube est tracée en vraie grandeur ci-dessous, tu peux t'en servir comme outil :

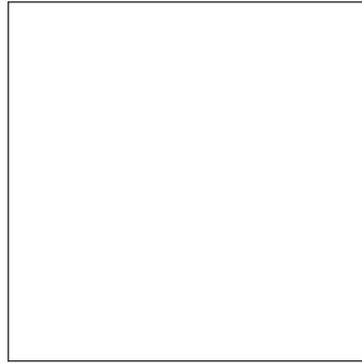


Trace le patron du prisme dessiné en perspective cavalière
(Les sommets du prisme sont les sommets ou les milieux des arêtes du cube.)

Du prisme au patron /2

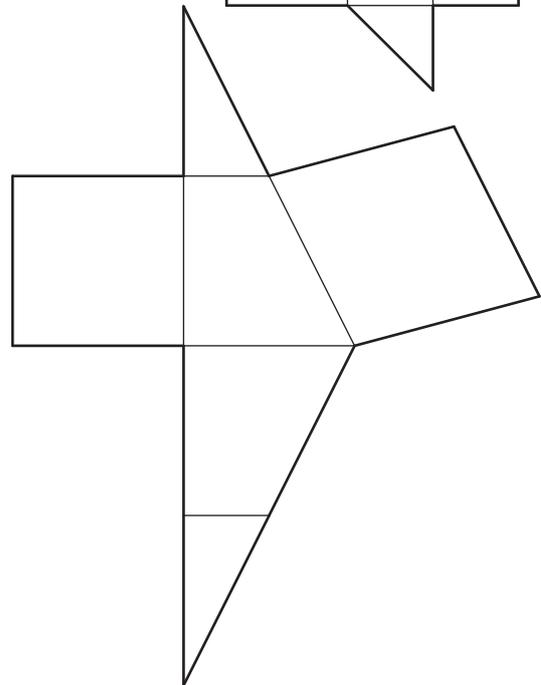
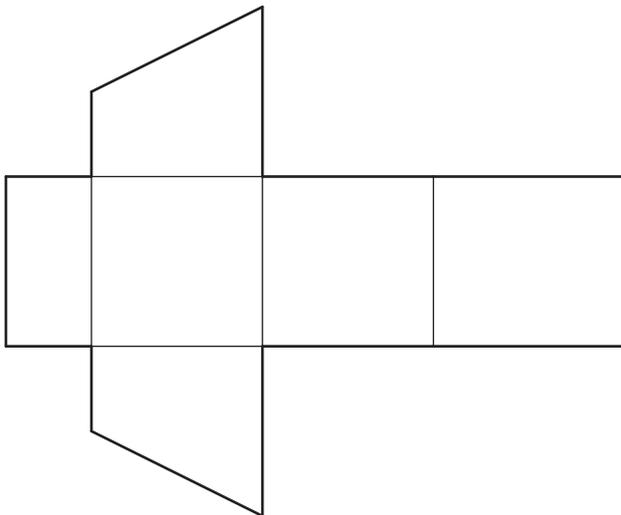
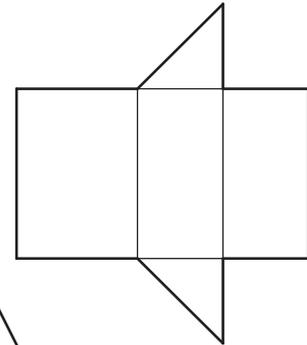
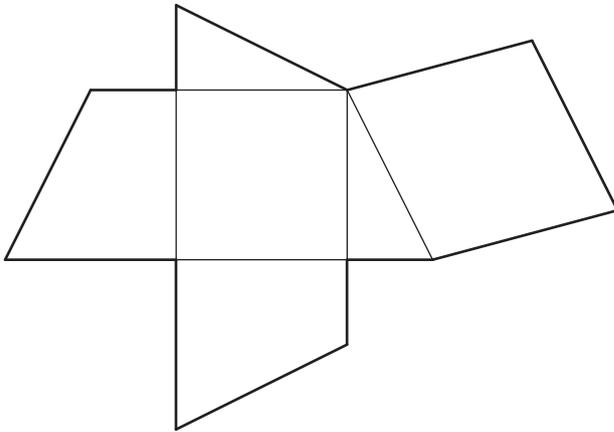
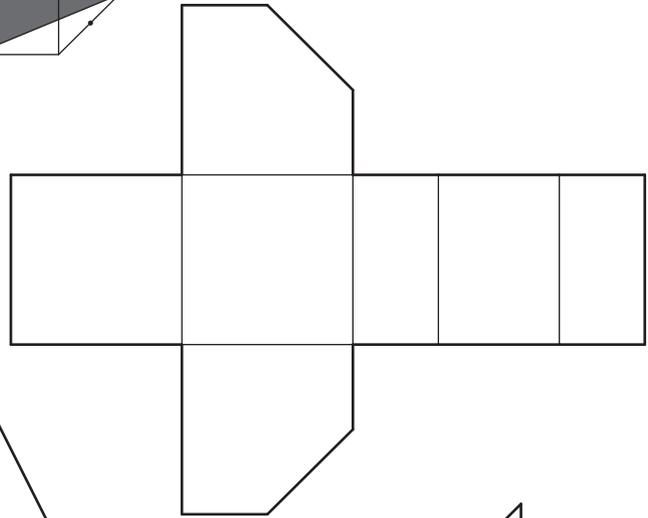
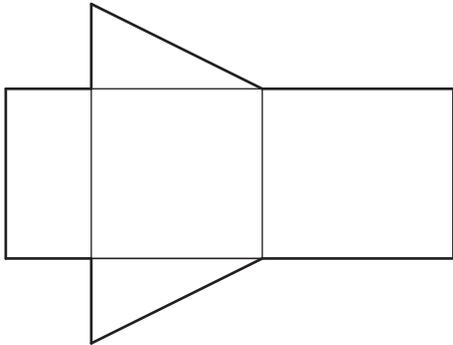
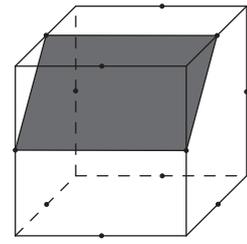
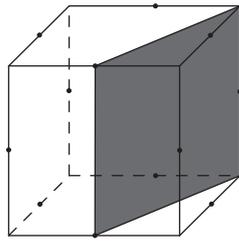
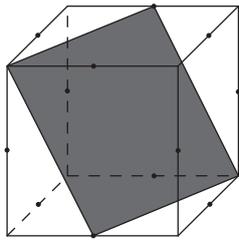


Une face du cube est tracée en vraie grandeur ci-dessous, tu peux t'en servir comme outil :



Trace le patron du prisme dessiné en perspective cavalière
(Les sommets du prisme sont les sommets ou les milieux des arêtes du cube.)

Recoller les morceaux

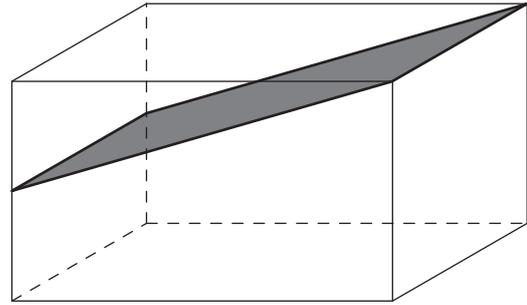


- Les 3 cubes du haut sont représentés en perspective cavalière
- Les points qui déterminent la section sont des sommets et/ou des milieux d'arêtes
- les patrons obtenus sont représentés en vraie grandeur

Associe à chaque section du cube, les deux patrons des morceaux obtenus après la coupe

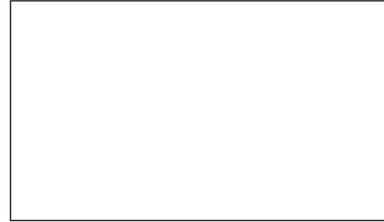
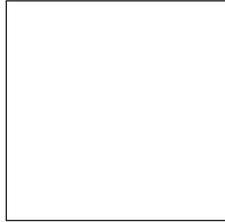
Deux morceaux de prisme

Un pavé droit a été coupé en deux,
selon un plan représenté ci-contre.
(le plan passe par des sommets du pavé ou
des milieux d'arêtes)



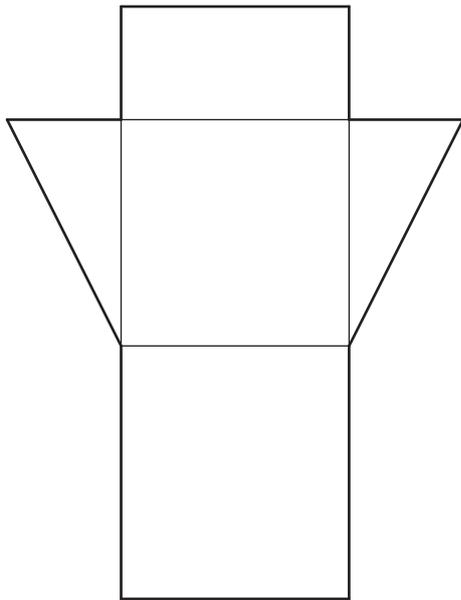
Les faces du pavé sont des rectangles
ou des carrés.

*Les faces composant ce pavé sont tracées en vraie grandeur ci-dessous,
tu peux t'en servir comme outil :*

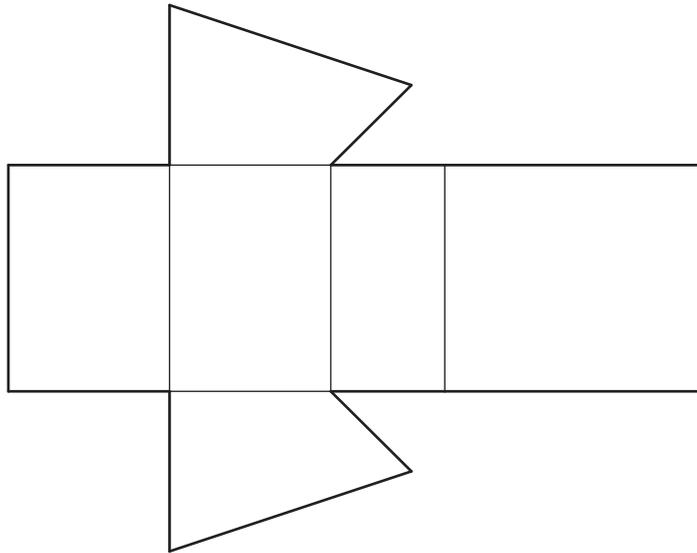


Dessine les patrons des deux solides obtenus après la coupe,

Entre patrons

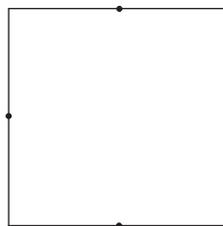
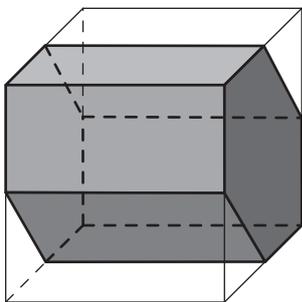
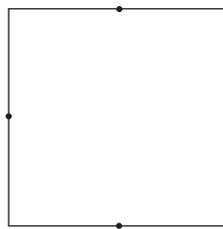
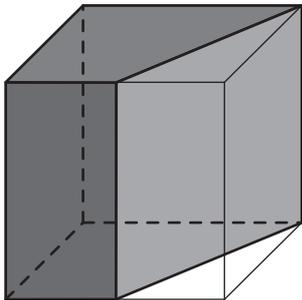
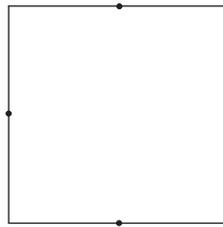
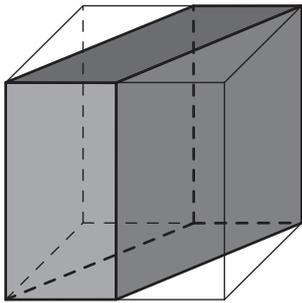
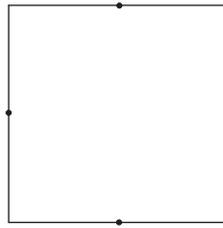
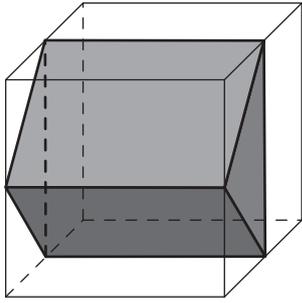


D'un prisme coupé en deux,
il ne reste que les patrons
des deux morceaux.



Sauras-tu construire le patron du prisme qui a été coupé en deux?
(2 prismes possibles)

Prisme et volume



- Les cubes dans lesquels sont construits les 4 prismes ont pour arête 5 cm.
- Les solides ne sont pas tracés en vraie grandeur.
- Les sommets des prismes sont des sommets et/ou des milieux d'arêtes des cubes.

Dessine l'une des bases de chacun des prismes dans le carré situé à côté.
Ensuite calcule l'aire de cette base puis le volume du prisme.