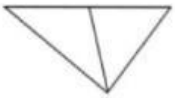
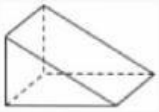
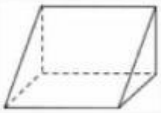
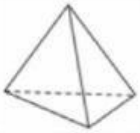
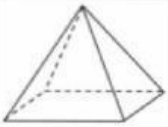
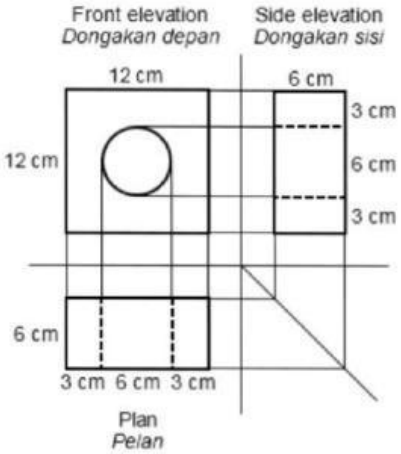
1. The diagram shows the orthogonal projection of solid *M* on a horizontal plane as vie rom the top.
Rajah di bawah menunjukkan unjuran ortogon bagi pepejal M pada satah mengufuk se mana yang dilihat dari atas.



Which of the following is solid *M*?
Antara berikut, yang manakah pepejal M?

- A 
- B 
- C 
- D 

2. A cylinder is removed from a cuboid. The diagram shows the plan, the front elevation and the side elevation of the remaining solid.
Sebuah silinder dibuang daripada sebuah kuboid. Rajah di bawah menunjukkan pelan, dongakan depan dan dongakan sisi pepejal yang tinggal itu.



Calculate the volume, in cm^3, of the remaining solid.
Hitung isi padu, dalam cm^3, *pepejal yang tinggal itu.*

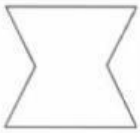
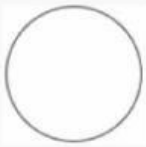
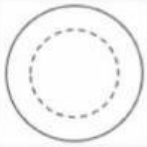
$\left[\text{Use/Guna } \pi = \frac{22}{7}\right]$

- A $185\frac{1}{7}$
- B $694\frac{2}{7}$
- C $750\frac{6}{7}$
- D $835\frac{5}{7}$

LIVEWORKSHEETS

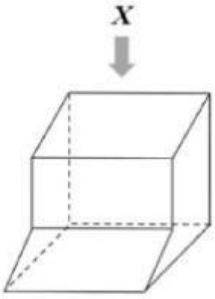
3.

Which of the following is a possible orthogonal projection of the above cut right cylinder on a vertical plane?
Antara berikut, yang manakah unjuran ortogon bagi silinder tegak terpotong di atas pada satah mencancang?

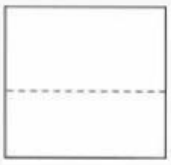
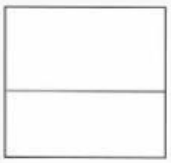
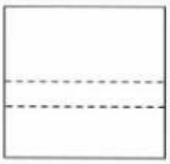
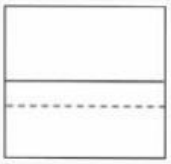
- A 
- B
- C 
- D 

LIVEWORKSHEETS

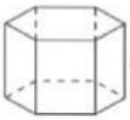
4. The diagram shows a right prism. The prism has 4 vertical faces, 2 inclined faces an rizontal base.
Rajah di bawah menunjukkan sebuah prisma tegak. Prisma itu mempunyai 4 muka me ang, 2 muka condong dan 1 tapak mengufuk.

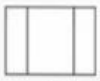


Which of the following is the orthogonal projection of the prism on a horizontal plane as viewed from *X*?
Antara berikut, yang manakah unjuran ortogon bagi prisma itu pada satah mengufuk sebagaimana yang dilihat dari X?

- A 
- B 
- C 
- D 

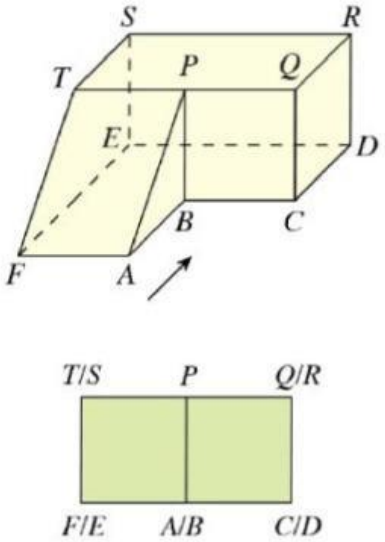
5. Which of the following represents the elevation of the object as seen from the given direction.
Antara berikut, yang manakah mewakili dongakan bagi objek di bawah mengikut arah yang diberi?



- A
- B
- C 
- D

LIVEWORKSHEETS

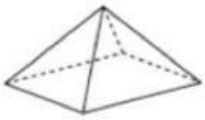
6. The diagram shows a solid and the orthogonal projection on the vertical plane as se m the direction indicated.
Rajah di bawah menunjukkan sebuah pepejal dan unjuran ortogon pada satah mencan sebagaimana dilihat dari arah yang dinyatakan.



Which of the following sides is **not** changed in length in the orthogonal projection?
*Antara berikut, sisi yang manakah panjangnya **tidak** berubah pada unjuran ortogon?*

- A *ST*
- B *CD*
- C *AF*
- D *AB*

7.



Which is the plan of the pyramid shown above?
Antara berikut, yang manakah pelan bagi piramid yang ditunjukkan di atas?

- A
- B
- C
- D

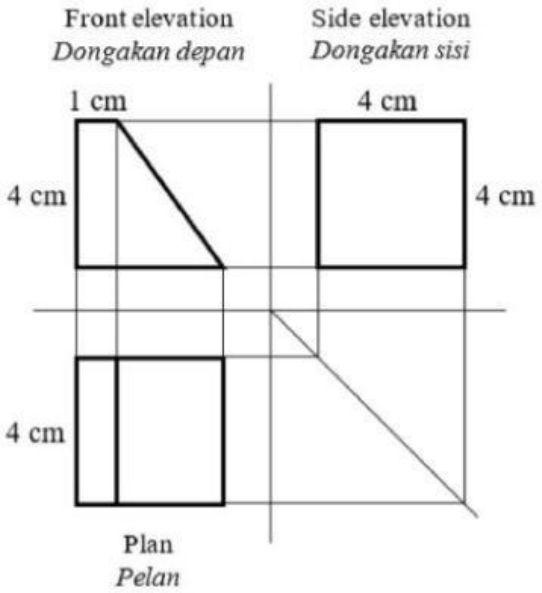
LIVEWORKSHEETS

8. The diagram below shows a right prism with a uniform cross section in the shape of [illegible]ular hexagon. In the centre of the prism, there is a hole in the shape of a cylinder.
Rajah di bawah menunjukkan sebuah prisma tegak dengan keratan rentas seragam be[illegible]k heksagon sekata. Pada pusat prisma itu, terdapat lubang yang berbentuk silinder.

The plan of the prism is
Pelan prisma itu ialah

- A
- B
- C
- D

9. A triangular prism is cut from a cube. The diagram shows the plan, the front elevation and the side elevation of the remaining solid on a horizontal plane.
Sebuah prisma segi tiga dipotong daripada sebuah kubus. Rajah di bawah menunjukkan pelan, dongakan depan dan dongakan sisi bagi pepejal yang tinggal yang terletak di atas satah mengufuk.

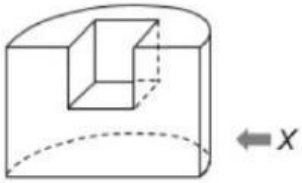


What is the surface area, in cm^2, of the remaining solid?
Berapakah luas permukaan, dalam cm^2, pepejal yang tinggal itu?

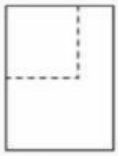
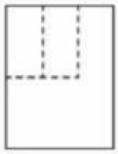
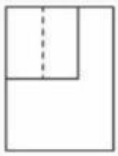
- A 72
- B 76
- C 92
- D 96

LIVEWORKSHEETS

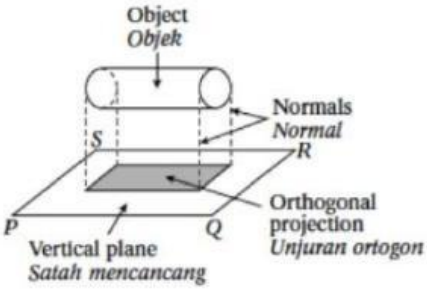
10. The diagram shows the remaining solid after a cube was removed from a half cylind
Rajah di bawah menunjukkan pepejal yang tinggal selepas sebuah kubus dibuang dari *ebuah separuh silinder.*



Which of the following is the elevation of the solid on a vertical plane as viewed from *X*?
Antara berikut, yang manakah dongakan pepejal itu pada satah mencancang seperti yang dilihat dari X?

- A
- B 
- C 
- D 

11. The diagram below shows the orthogonal projection of an object on the plane *PQRS*.
Rajah di bawah menunjukkan unjuran ortogon bagi sebuah objek di atas satah PQRS.

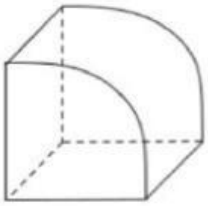


Which of the following is labelled **wrongly** in the diagram?
Antara berikut, yang manakah **salah** *dilabel dalam rajah itu*?

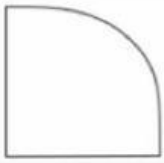
- **A** Object
  Objek
- **B** Normals
  Normal
- **C** Orthogonal projection
  Unjuran ortogon
- **D** Vertical plane
  Satah mencancang

LIVEWORKSHEETS

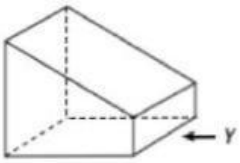
12.



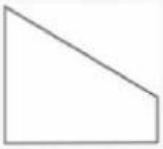
Which of the following is a possible orthogonal projection of the above object on a vertical plane?
Antara berikut, yang manakah unjuran ortogon bagi objek di atas pada satah mencancang?

- A 
- B
- C
- D

13. The diagram below shows a right prism on a horizontal plane.
Rajah di bawah menunjukkan sebuah prisma tegak pada satah mengufuk.



Which of the following is the side elevation of the solid as viewed from *Y*?
Antara berikut, yang manakah dongakan sisi bagi pepejal sebagaimana dilihat dari Y?

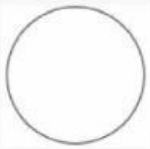
- A 
- B
- C
- D

LIVEWORKSHEETS

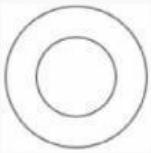
14.

Which of the following is a possible orthogonal projection of the above cut inverted circular cone on a horizontal plane?
Antara berikut, yang manakah unjuran ortogon bagi kon membulat songsang yang terpotong di atas pada satah mengufuk?

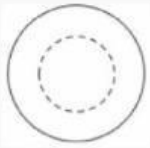
○ **A**



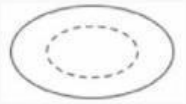
○ **B**



○ **C**



○ **D**



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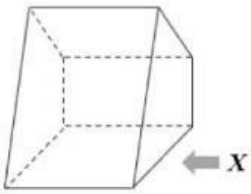
15. The diagram shows a right prism. The prism has 1 vertical face, 2 inclined faces and 1 horizontal base.
Rajah di bawah menunjukkan sebuah prisma tegak. Prisma itu mempunyai 1 muka mencancang, 2 muka condong dan 1 tapak mengufuk.



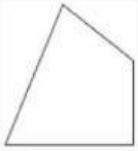
Which of the following is the side elevation of the prism as viewed from *X*?
Antara berikut, yang manakah dongakan sisi bagi prisma itu sebagaimana dilihat dari X?

○ **A**

○ **B**

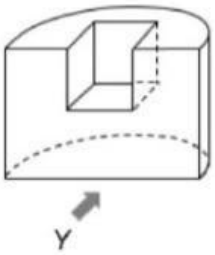
○ **C**

○ **D**

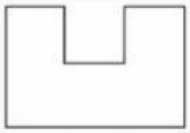
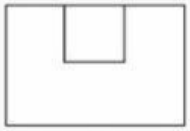
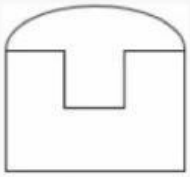
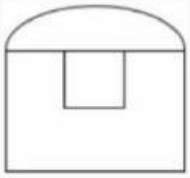


LIVEWORKSHEETS

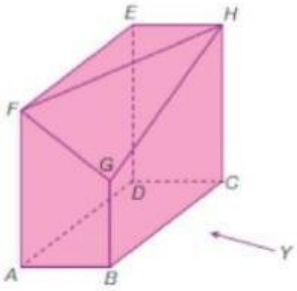
16. The diagram shows the remaining solid after a cube was removed from a half cylind
Rajah di bawah menunjukkan pepejal yang tinggal selepas sebuah kubus dibuang dari *ebuah separuh silinder.*



Which of the following is the elevation of the solid on a vertical plane as viewed from *Y*?
Antara berikut, yang manakah dongakan pepejal itu pada satah mencancang seperti yang dilihat dari Y?

- A 
- B 
- C 
- D 

17. The diagram shows an object placed on a horizontal ground.
Rajah di bawah menunjukkan sebuah pepejal yang terletak pada satah mengufuk.

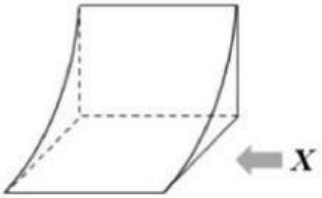


Which of the following sides, has the diffferent length with the orthogonal projection as viewed from *Y*?
Antara sisi objek berikut, yang manakah mempunyai panjang yang berbeza dengan unjuran ortogonnya apabila dilihat dari arah Y?

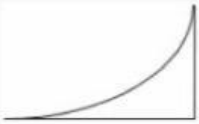
- **A** *BC*
- **B** *GB*
- **C** *FG*
- **D** *GH*

LIVEWORKSHEETS

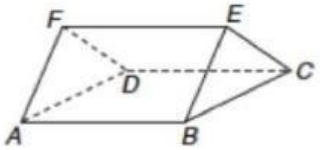
18. A quarter cylinder is cut from a cuboid. The diagram shows the remaining solid.
Sebuah sukuan silinder dipotong daripada sebuah kuboid. Rajah di bawah menunjukka ejal yang tinggal.



Which of the following is the side elevation of the remaining solid as viewed from *X*?
Antara berikut, yang manakah dongakan sisi bagi pepejal yang tinggal itu sebagaimana dilihat dari X?

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

19. The diagram below shows a right prism with a horizontal base *ABCD*.
Rajah di bawah menunjukkan sebuah prisma tegak dengan tapak mengufuk ABCD.



The number of vertical planes of the prism is
Bilangan satah mencancang bagi prisma itu ialah

- **A** 0
- **B** 2
- **C** 3
- **D** 5

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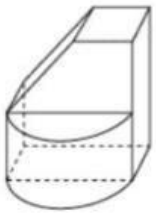
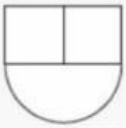
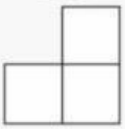
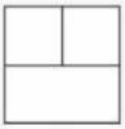
20. The diagram shows a solid consisting of a right prism and a half cylinder.
Rajah di bawah menunjukkan sebuah pepejal yang terdiri daripada sebuah prisma tegak dan sebuah separuh silinder.



Which of the following is the plan of the solid?
Antara berikut, yang manakah ialah pelan bagi pepejal itu?

- A 
- B 
- C 
- D

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