THIRD SPACE LEARNING

Surface Area Check for Understanding

A 10 question retrieval quiz for students in grade 6.

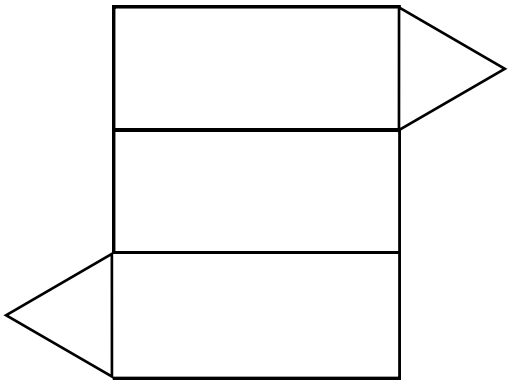
Grades 6

Questions

Name: ..... Class: .....

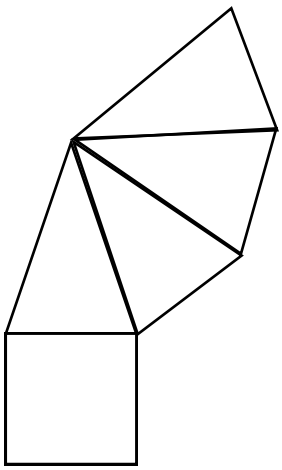
Date: ..... Score: .....

1 Which 3D figure's net is shown?



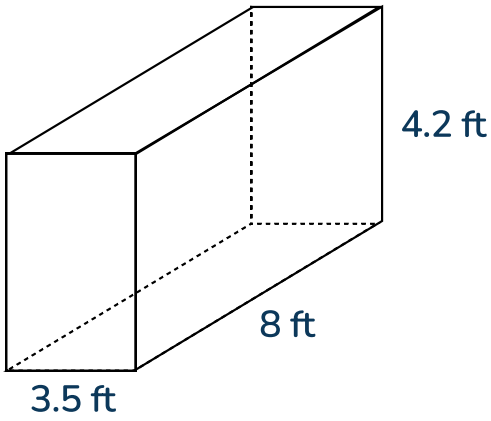
Answer

2 Which 3D figure's net is shown?



Answer

3 Calculate the surface area of the rectangular prism.

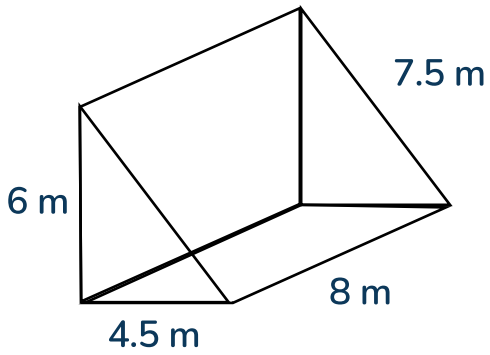


Answer

4 A box is 11ft wide, 15.5ft long and 60 inches tall. How many cubic feet of fabric is needed to cover all sides of the box?

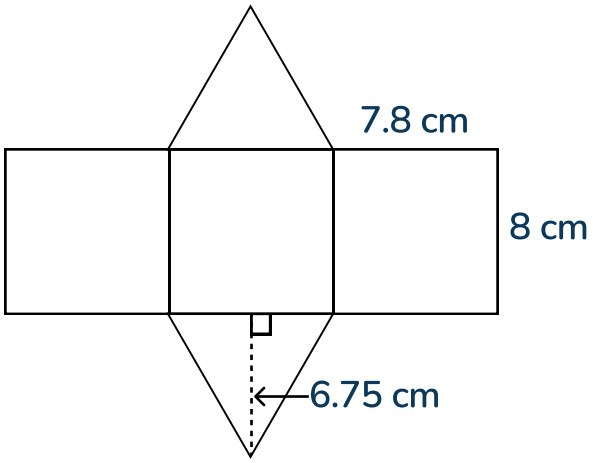
Answer

5 Calculate the surface area of the triangular prism.



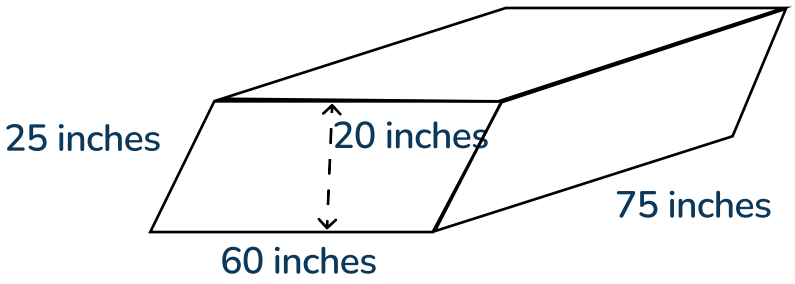
Answer

6 Calculate the surface area of the equilateral triangular prism.



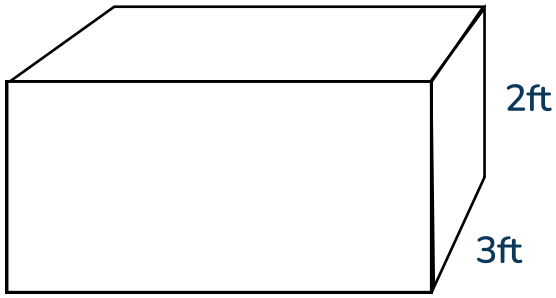
Answer

7 Calculate the surface area of the parallelogram prism.



Answer

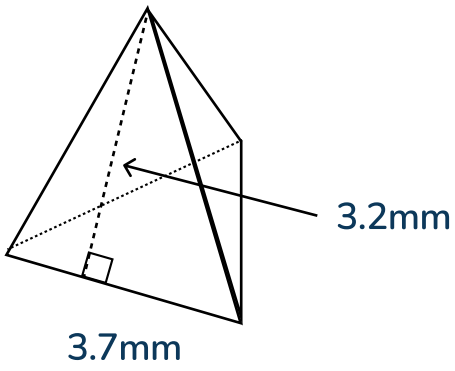
8



Rian painted an area of 47ft² on the rectangular box shown above. She painted all sides, except the bottom. How many feet long is the box?

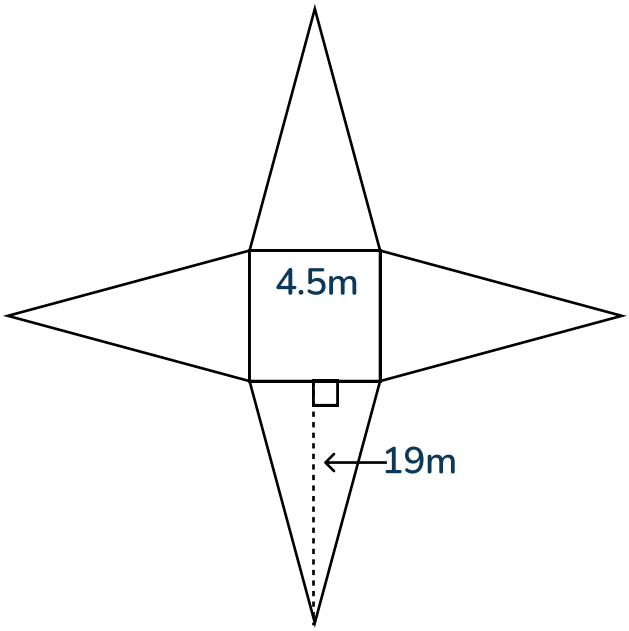
Answer

9 Calculate the surface area of the pyramid. All faces are equilateral triangles. The perpendicular height is 3.2mm



Answer

10 Calculate the surface area of the square pyramid given the net below.



Answer

Answers

Question number	Question	Answers	Standard
1	Which 3D figure's net is shown?	Triangular prism	6.G.A.4
2	Which 3D figure's net is shown?	Square pyramid	6.G.A.4
3	Calculate the surface area of the rectangular prism.	Front/Back face: 3.5 x 4.2 = 14.7 Left/right face: 8 x 4.2 = 33.6 Top/bottom face: 8 x 3.5 = 28 14.7 + 14.7 + 33.6 + 33.6 + 28 + 28 = **152.6ft²**	6.G.A.4
4	A box is 11 ft wide, 15.5 ft long and 60 inches tall. How many cubic feet of fabric is needed to cover all sides of the box?	Front/Back face: 15.5 x 5 = 77.5 Left/right face: 11 x 5 = 55 Top/bottom face: 11 x 15.5 = 170.5 77.5 + 77.5 + 55 + 55 + 170.5 + 170.5 = **606ft²**	6.G.A.4
5	Calculate the surface area of the triangular prism.	Triangular base: ½ x 4.5 x 6 = 13.5 Back side: 8 x 6 = 48 Front side: 7.5 x 8 = 60 Bottom side: 4.5 x 8 = 36 13.5 + 13.5 + 48 + 60 + 36 = **171m²**	6.G.A.4

Question number	Question	Answers	Standard
6	Calculate the surface area of the equilateral triangular prism.	Triangular base: ½ x 6.75 x 7.8 = 26.325 Each lateral face: 8 x 7.8 = 62.4 26.325 + 26.325 + 62.4 + 62.4 + 62.4 = **239.85cm²**	6.G.A.4
7	Calculate the surface area of the parallelogram prism.	Parallelogram base: 20 x 60 = 1,200 Top/bottom faces: 75 x 60 = 4,500 Left/right faces: 75 x 25 = 1,875 1,200 + 1,200 + 4,500 + 4,500 + 1,875 + 1,875 = **15,150 inches²**	6.G.A.4
8	Rian painted an area of 47ft² on the rectangular box shown above. She painted all sides, except the bottom. How many feet long is the box?	5ft	6.G.A.4
9	Calculate the surface area of the pyramid. All faces are equilateral triangles. The perpendicular height is 3.2mm	Area of one triangular face: ½ x 3.7 x 3.2 = 5.92 5.92 + 5.92 + 5.92 + 5.92 = **23.68mm²**	6.G.A.4
10	Calculate the surface are of the square pyramid given the net below.	Square bases: 4.5 x 4.5 = 20.25 Each lateral face: ½ x 4.5 x 19= 42.75 20.25 + 42.74 + 42.75 +42.75 +42.75 = **191.25m²**	6.G.A.4

Do you have a group of students who need a boost in math?

Each student could receive a personalized lesson every week from our specialist one-on-one math tutors.

- Differentiated instruction for each student
- Aligned to your state's standard
- Scaffolded learning to close gaps

Speak to us

thirdspacelearning.com/us/

+1 929-298-4593

hello@thirdspacelearning.com

THIRD SPACE LEARNING