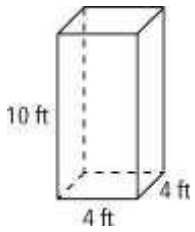
Name ---------- Class ----------Date----------

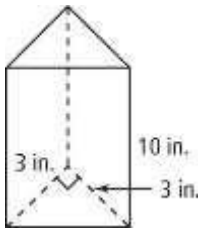
HW-51 Surface Area

Use a net to find the surface area of each prism. Round your answer to the nearest whole number.

1.

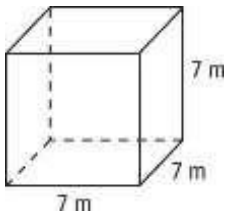


2.

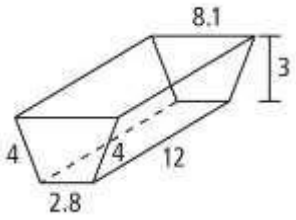


Use formulas to find the lateral area and surface area of each prism. Round your answer to the nearest whole number.

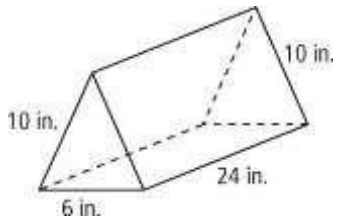
3.



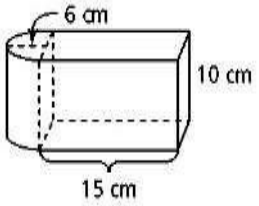
4.



5.

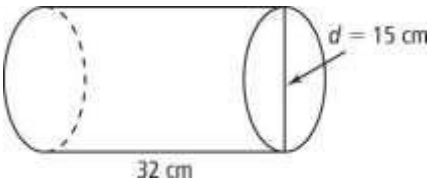


6. Judging by appearances, what is the surface area of the solid shown at the right? Show your answer to the nearest whole number.

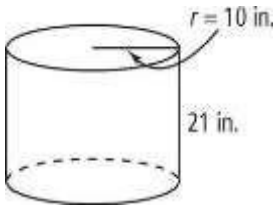


7. Find the surface area of each cylinder in terms of π.

8.



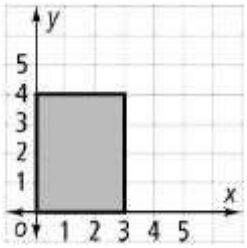
9.



10. a. Reasoning Suppose that a cylinder has a radius of r units and a height of $2r$ units. The lateral area of the cylinder is 64 square units. What is the value of r?

b. What is the surface area of the cylinder? Round your answer to the nearest square unit.

Visualization Suppose you revolve the plane region completely about the given line to sweep out a solid of revolution. Describe the solid and find its surface area in terms of π.



11. the x-axis

12. the y-axis

13. the line $x = 3$