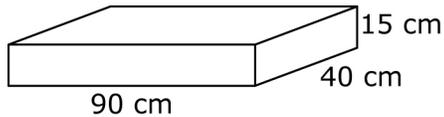


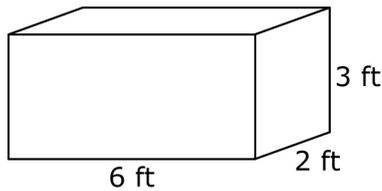
Section 1.3 Extra Practice

1. Calculate the surface area of each rectangular prism.

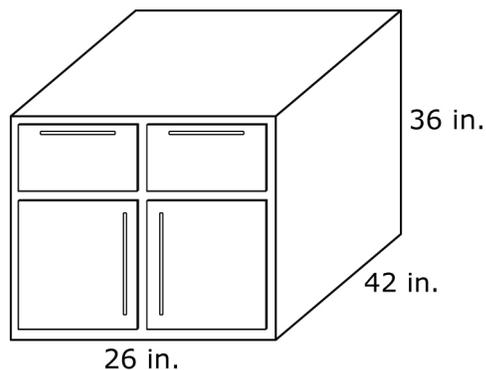
a)



b)

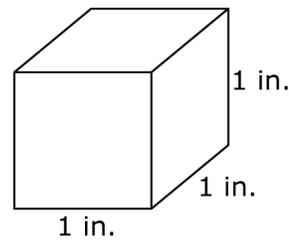


2. The dimensions of a new kitchen island are 42" long, 36" high, and 26" wide.



- a) Calculate the surface area of the island.
 b) The bottom will not be stained. What is the total area to be stained?
 c) Express your answer to part b) to the nearest square foot.

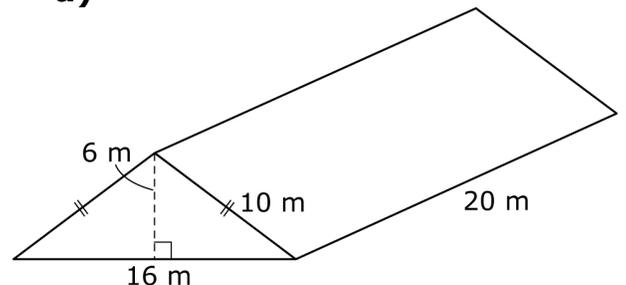
3. A cube has edge lengths of 1 in.



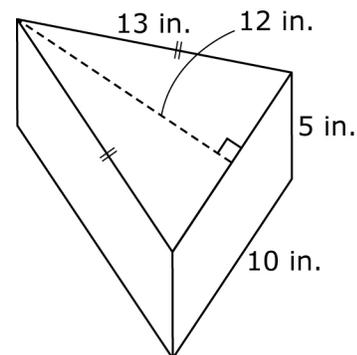
- a) Calculate the area of one face of this cube.
 b) Calculate the surface area of the entire cube.
 c) Calculate the surface area of a cube with edge lengths of 2 in.
 d) Does the surface area double if the edge length doubles?

4. Calculate the surface area of each triangular prism.

a)



b)

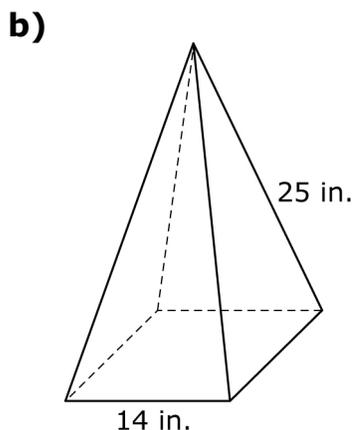
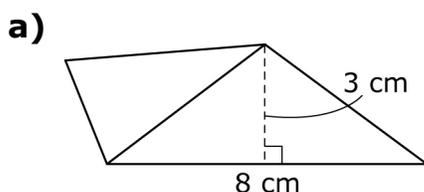


5. a) Suppose the dimension of 20 m in #4a) doubles to 40 m. What is the surface area now? Does the surface area double?
 b) Suppose the dimension of 5 in. in #4b) doubles to 10 in. What is the surface area now? Does the surface area double?

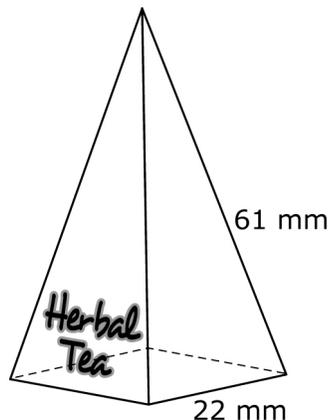
6. A stained-glass kaleidoscope is made in the shape of a triangular prism. Calculate the surface area of the kaleidoscope. **Hint:** Use the Pythagorean relationship.



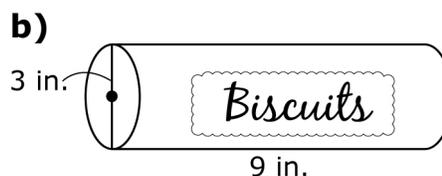
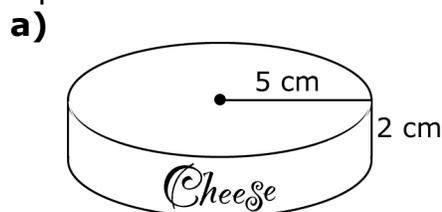
7. Calculate the surface area of each square-based pyramid.



8. A brand of herbal tea is packaged in a box in the shape of a square-based pyramid. Calculate the surface area of the box.



9. Calculate the surface area of each cylinder, to the nearest square unit.



10. The vase shown is a cylinder with one open end. Calculate the surface area if you wish to paint the outside of the vase. Express your answer to the nearest tenth of a square foot.

