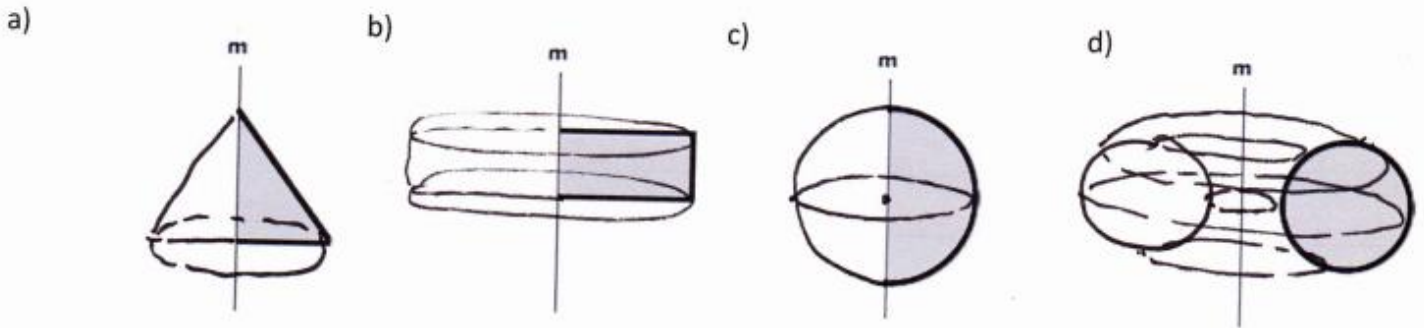**1. Describe the solid that is formed by rotating each of these figures about line m and sketch it.**
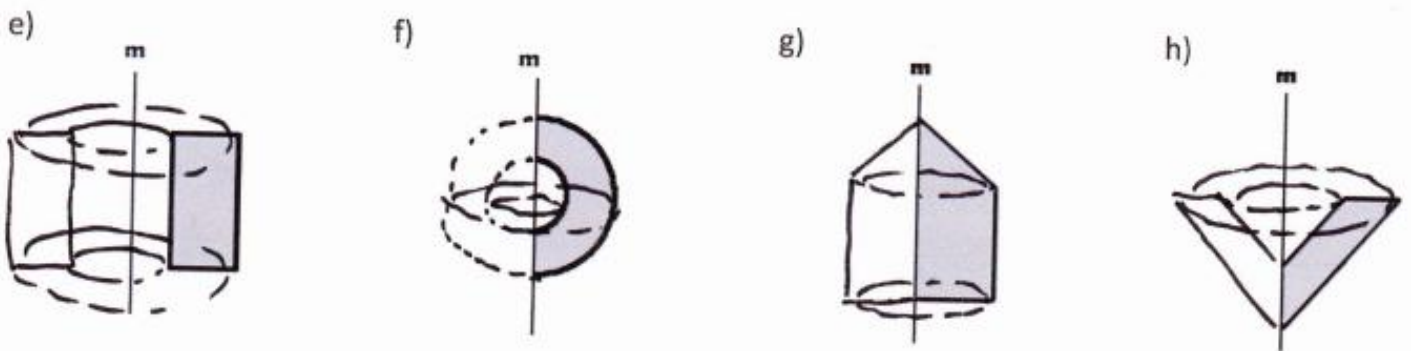
a)

Name/Description

b)

Name/Description

c)

Name/Description

d)

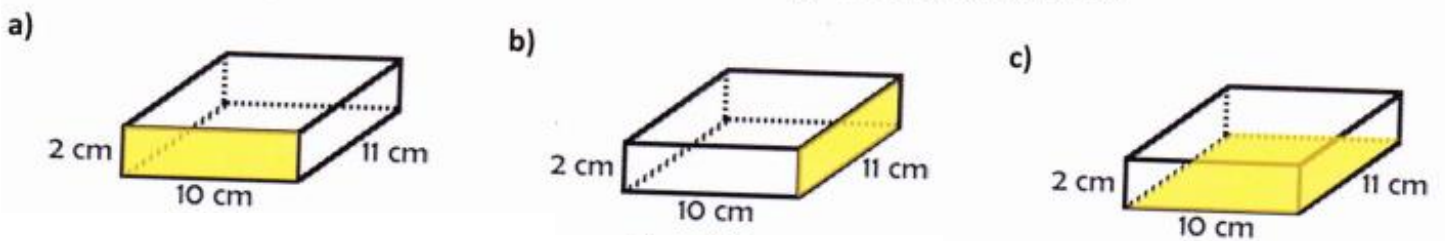
Name/Description

2.

e)

Name/Description

f)

Name/Description

g)

Name/Description

h)

Name/Description

1. The same rectangular prism is provided three times below but in each instance a DIFFERENT BASE has been highlighted. Calculate the volume for each but change the base dimensions.
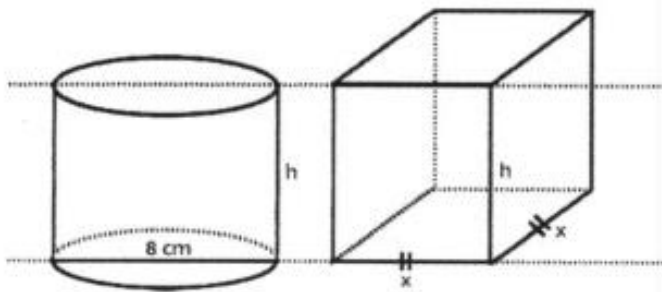
a)

2 cm   11 cm
10 cm

b)

2 cm   11 cm
10 cm

c)

2 cm   11 cm
10 cm

What did you notice about the volumes of the three examples? Why didn't changing the bases change the volume?

8. An enclosed glass box contains 1620 in³ of water. When the glass box is tilted on its side the water shifts places. What is the relationship of the water before and after the tilting? What is the height of the water when the box is tiled upright?

27 in.

12 in.

18 in.

? cm

18 in.

12 in.

5 in.

27 in.
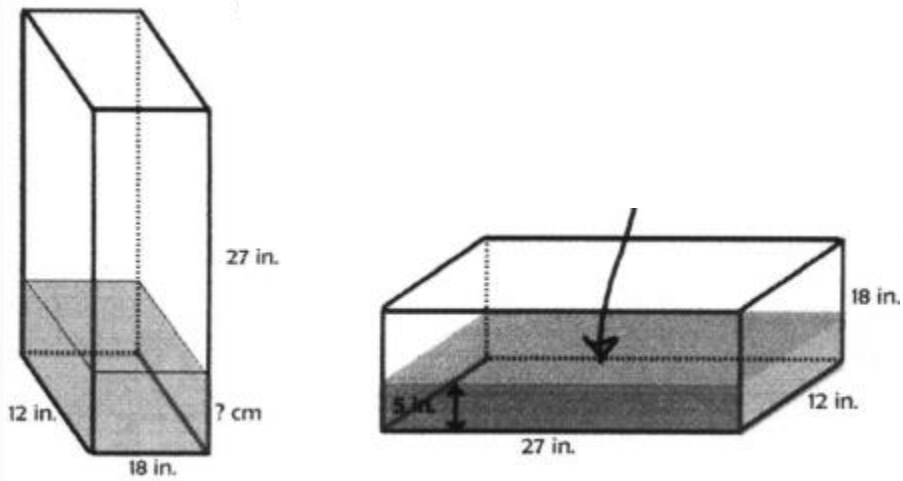
A rectangular prism and a cylinder have the same height and volume. What is the length of the side of the prism's square base?

h

8 cm

h

x

x

Find the volume.

b)

18 cm

12 cm

10 cm

5 cm