9.4

VOLUME OF PRISMS

Rounding Decimals

0-4 stay the same
5-9 round up

Round the following to the nearest:

Whole number

1) 3.5

2) 15.432

3) 7.603

4) 9.78

Tenths place number

5) 3.592

6) 15.432

7) 7.603

8) 9.78

Rounding Decimals

Round to the indicated place

0-4 stay the same
5-9 round up

9) 1.2852 (Thousandths)

10) 3.157 (Hundredths)

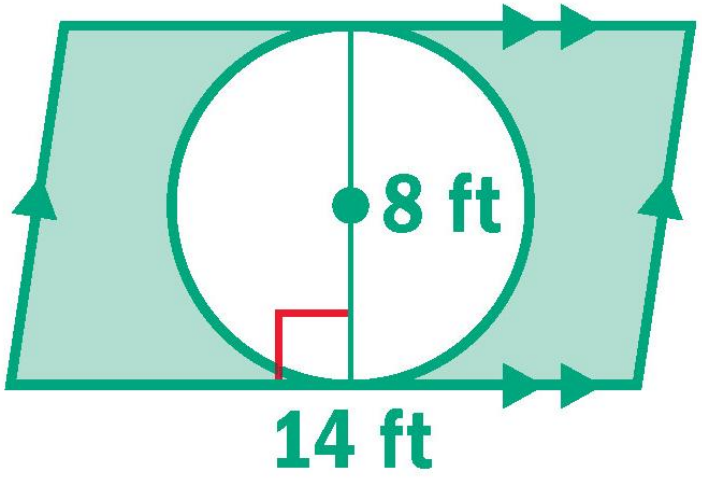
11) 12.449 (Tenths)

12) 0.349 (Hundredths)

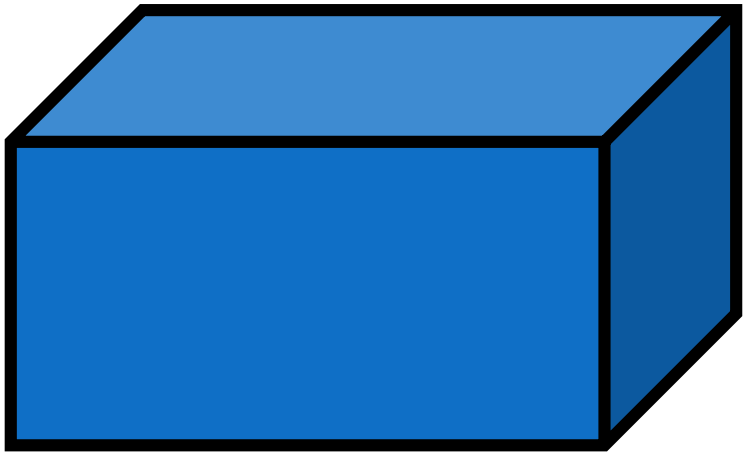
DO NOW

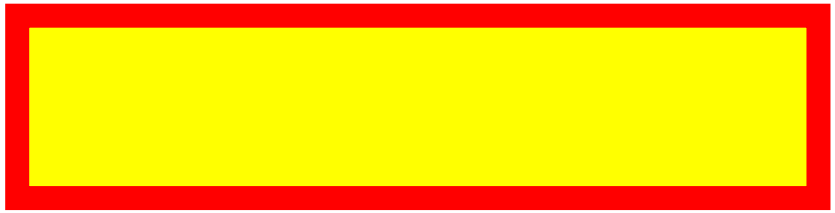
Find the area of the green region.

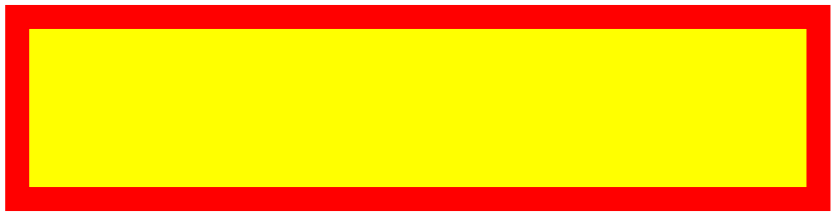
13)



Volume Formula of a Rectangular Prism





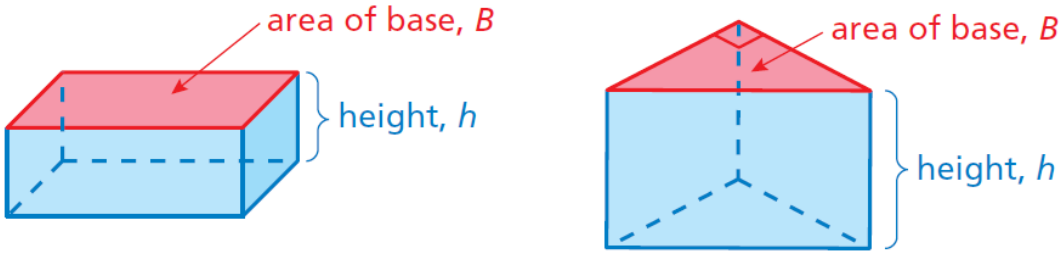


Volume of Prisms

The *volume* of a three-dimensional figure is a measure of the amount _____ that it occupies.

Volume is measured in _____ units.

<u>Volume of a prism:</u> the _____ of the area of the _____ and the _____ of the prism.

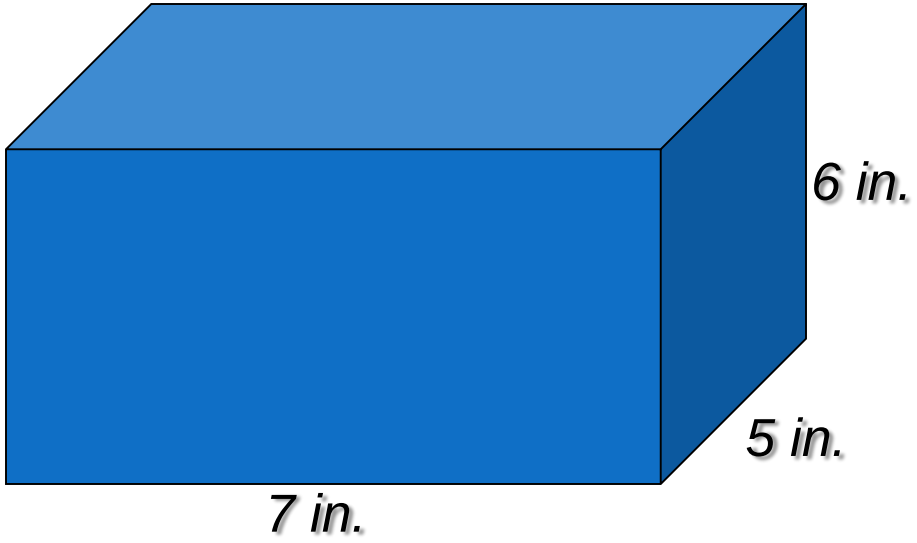


V=BH

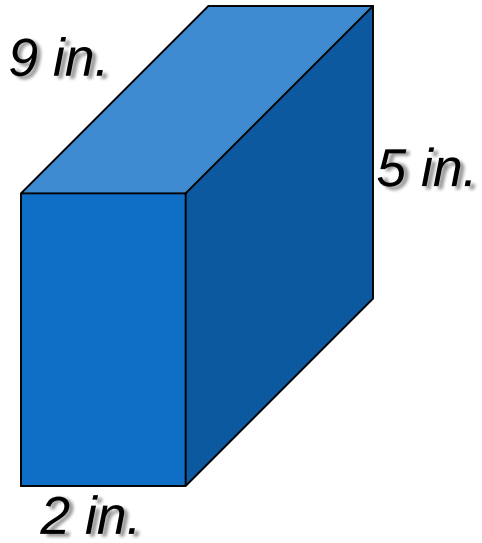
Area of base

Height of prism

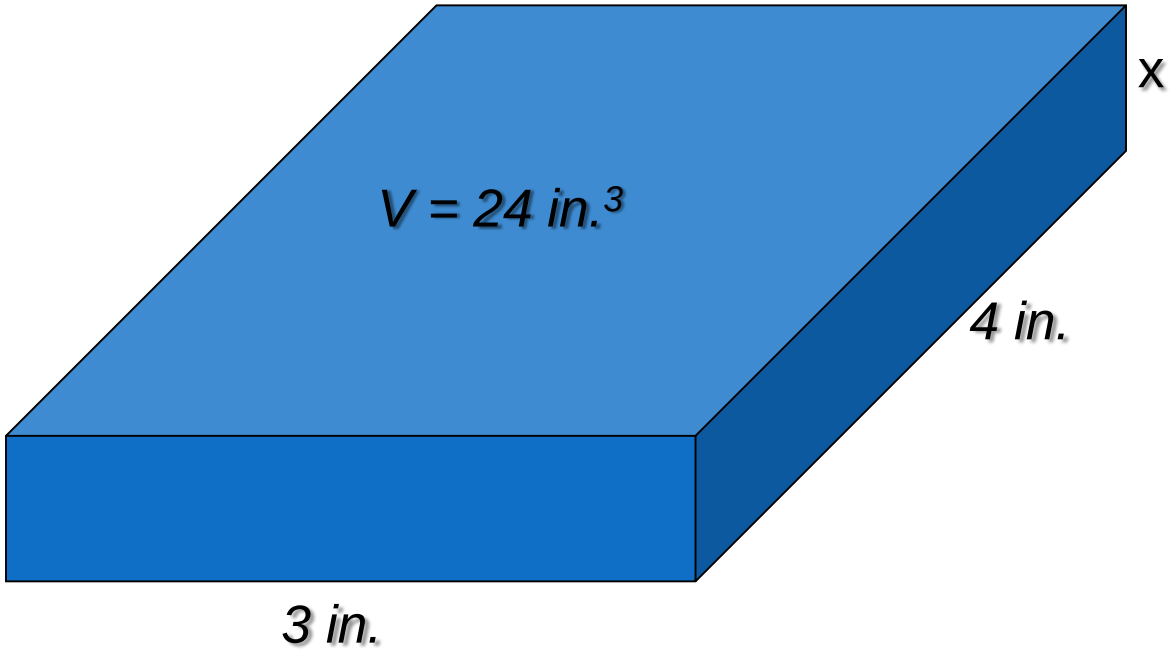
1) Find the volume:



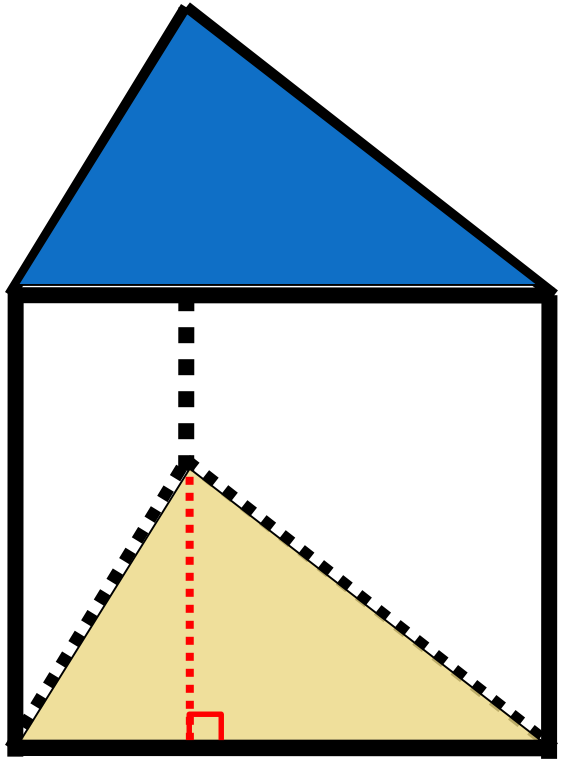
2) Find the volume:

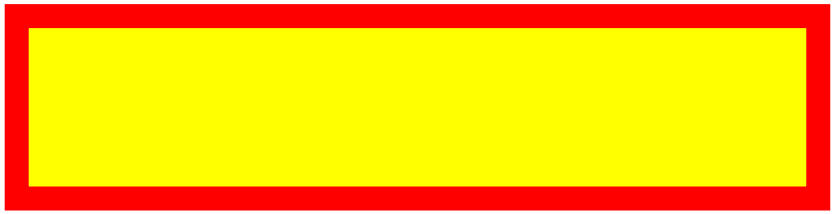


3) Find the missing side:

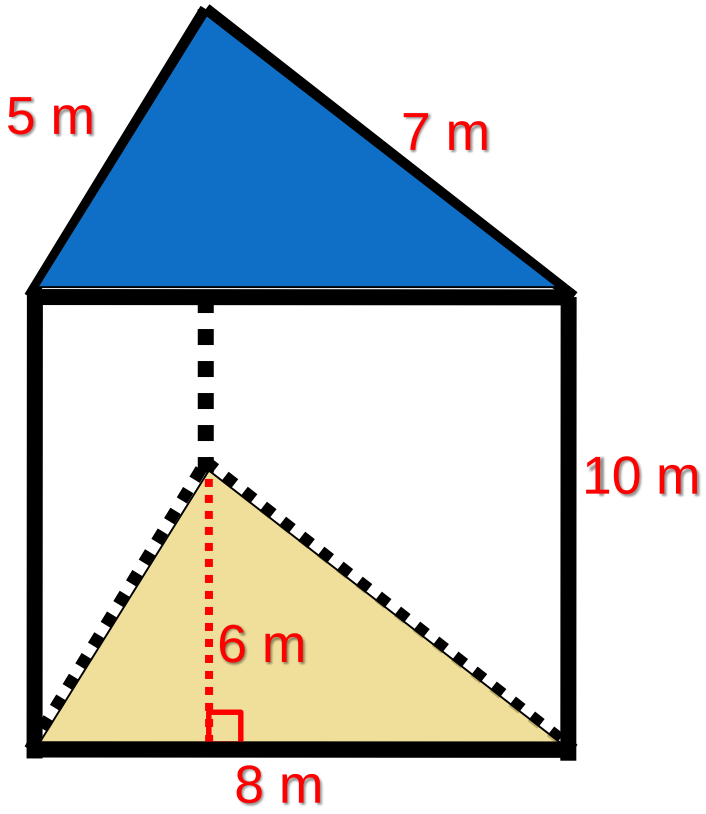


VOLUME FORMULA OF A TRIANGULAR PRISM

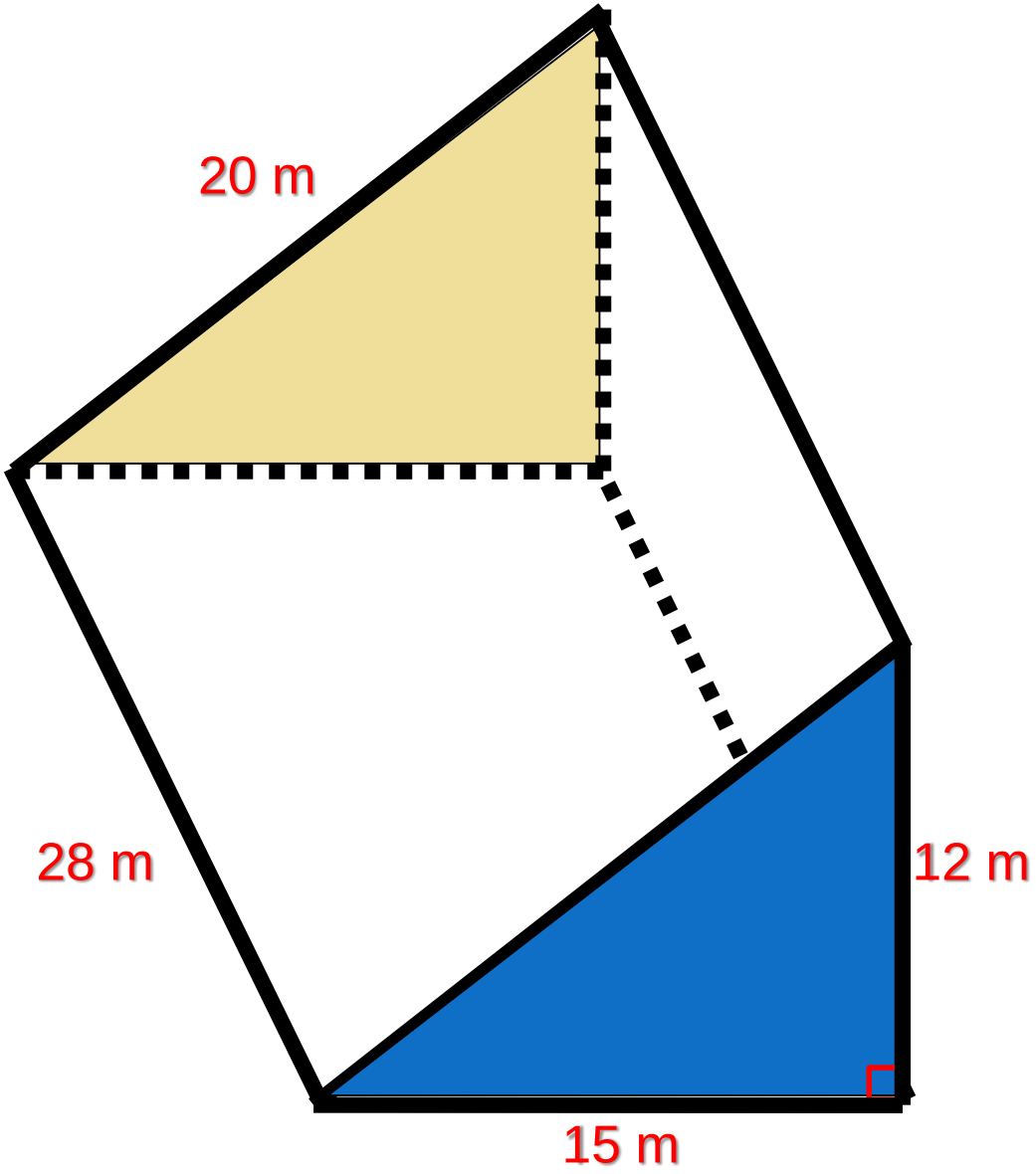




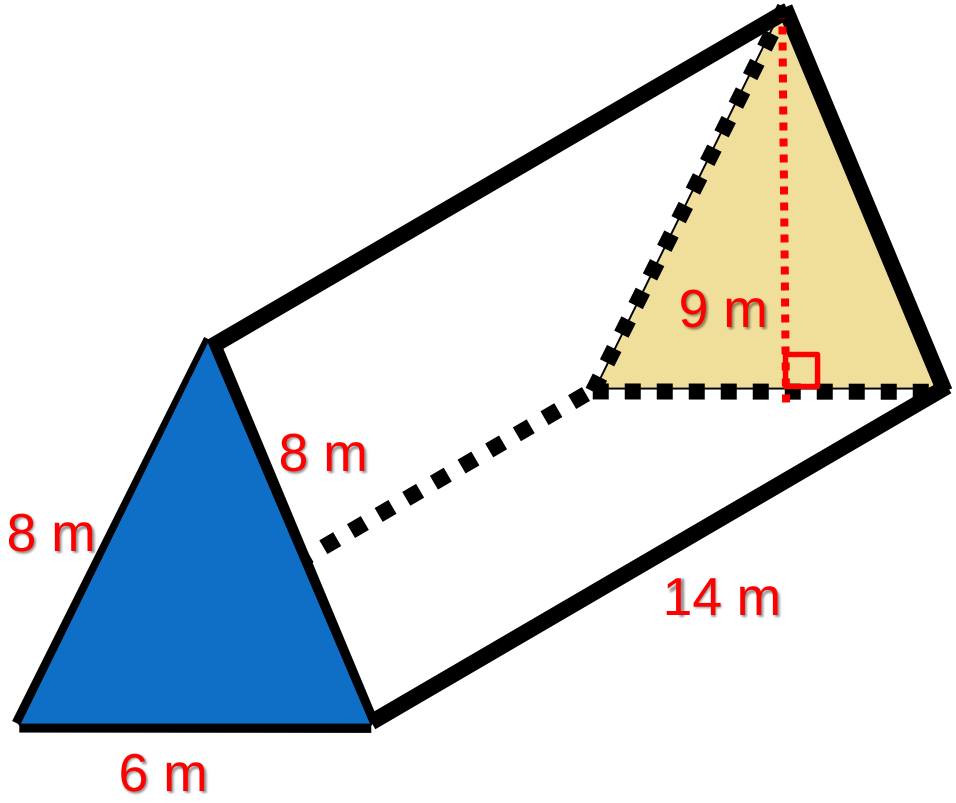
4) Find the Volume



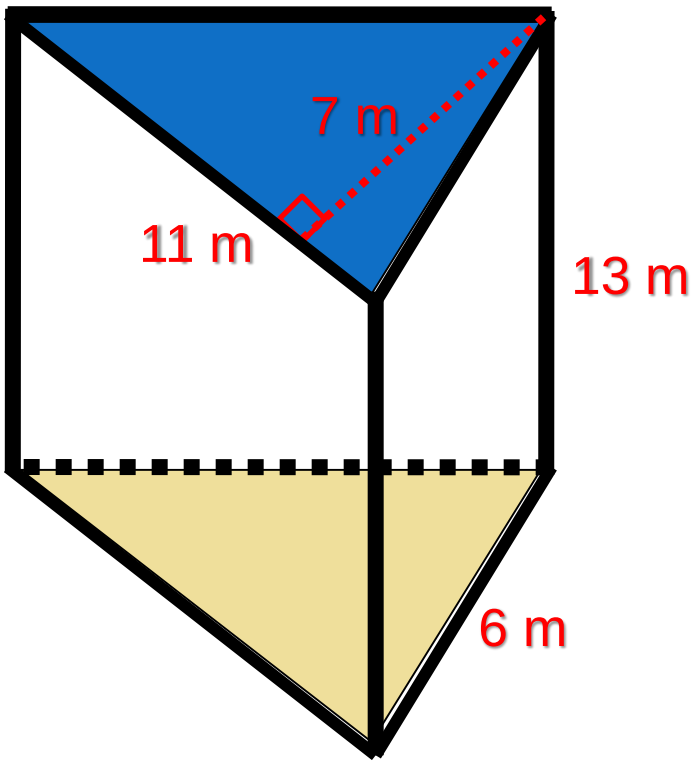
5) Find the Volume



6) Find the Volume

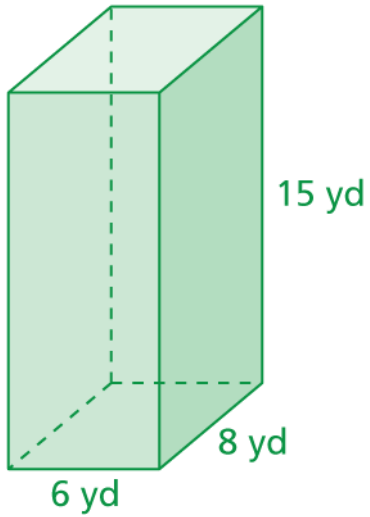


7) Find the Volume



Practice

1) Find the volume.

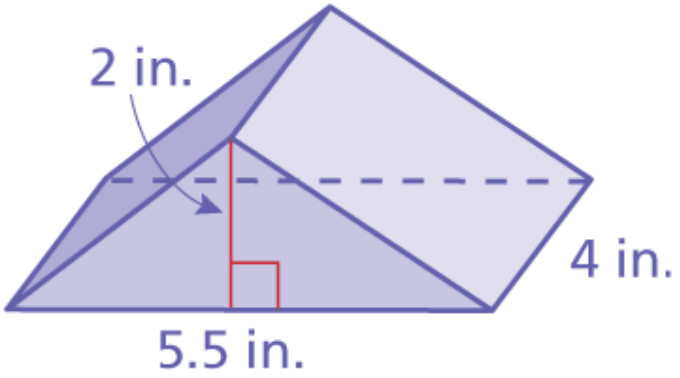


Practice

2) Find the volume of a rectangular prism with a length of 2 meters, a width of 6 meters, and a height of 3 meters.

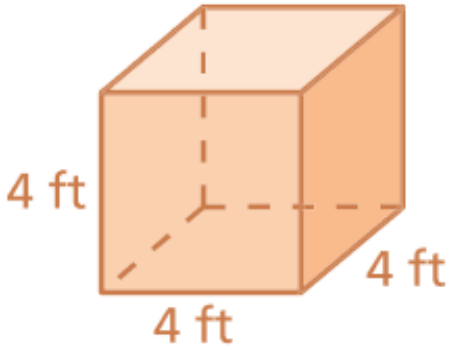
Practice

3) Find the volume.



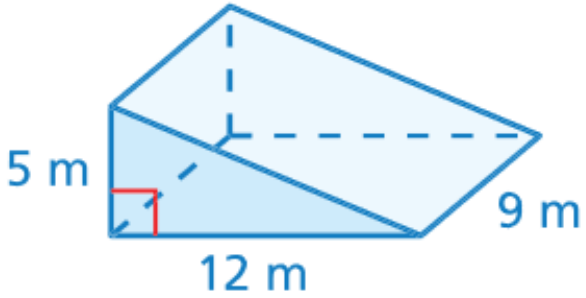
Practice

4) Find the volume.



Practice

5) Find the volume.



Practice

6) A movie theater designs two bags to hold 96 cubic inches of popcorn. (a) Find the height of each bag. (b) Which bag should the theater choose to reduce the amount of paper needed? Explain.