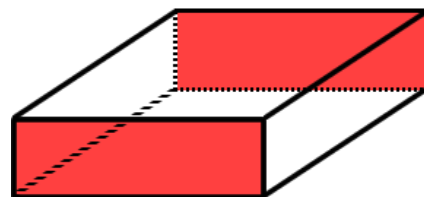
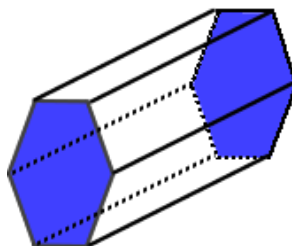
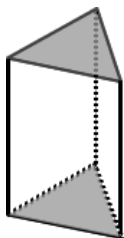
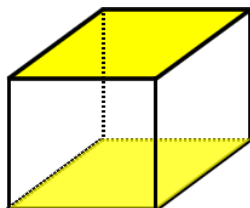


PRISMS

A solid formed by a polygon and its parallel, translated image being connected by quadrilaterals along their edges.



Bases of a prism – The \cong and parallel faces of a prism (non-rectangular if present)

Lateral faces of a prism – Faces that are not the bases/ faces that connect the bases

Height of a prism – \perp distance between the 2 bases

Your Turn: Given the rectangular prism with face BCFE as one of its bases.

Use each value ONLY ONCE.

- C 1. Edge
 E 2. Lateral Face
 A 3. Base
 D 4. Vertex
 B 5. Height

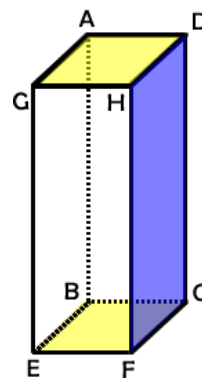
A. Rectangle ADHG

B. \overline{HF}

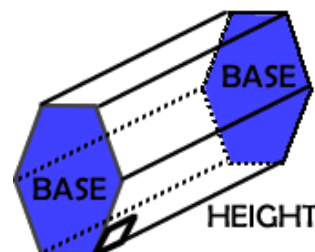
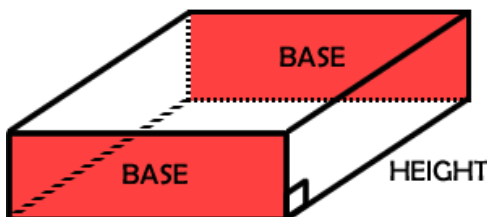
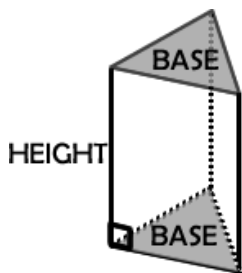
C. \overline{AD}

D. Point B

E. Rectangle HDCF



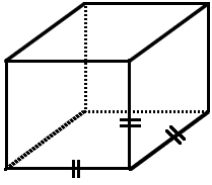
Right prisms – prisms with \perp bases and lateral faces



Volume_{PRISM} = Bh where B = the area of base and h = height of prism

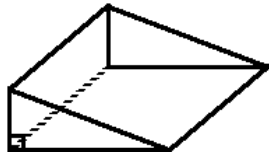
1. Properly name the following prisms.

a)



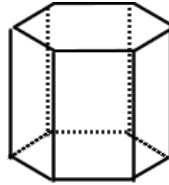
Name: cube

b)



Name: Right triangular prism

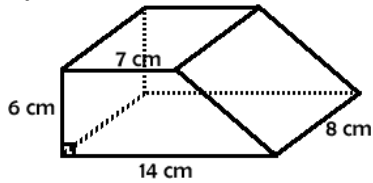
c)



Name: Right hexagonal prism

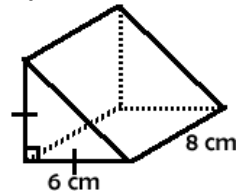
2. Determine the volume of the prisms. (Lines that appear perpendicular are perpendicular.)

a)



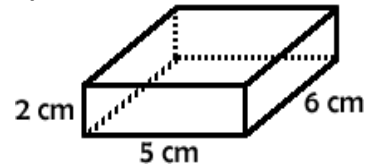
Name Right trapezoidal prism

b)



Name Right triangular prism

c)



Name Right rectangular prism

$$V = Bh$$

$$B = \frac{1}{2} (6)(7 + 14) = 63$$

$$V = (63)(8)$$

$$\text{Volume} = \underline{504 \text{ cm}^3}$$

$$V = Bh$$

$$B = \frac{1}{2} (6)(6) = 18$$

$$V = (18)(8)$$

$$\text{Volume} = \underline{144 \text{ cm}^3}$$

$$V = Bh$$

$$B = (2)(5) = 10$$

$$V = (10)(6)$$

$$\text{Volume} = \underline{60 \text{ cm}^3}$$