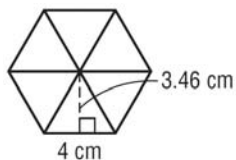# Enrich

Volume of Hexagonal Prisms

To determine the area of a regular hexagon, divide it into 6 congruent triangles. Determine the area of one triangle and multiply by 6.

$A = \left(\frac{1}{2} bh\right) \cdot 6$

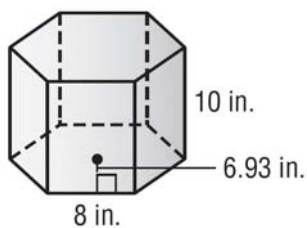$A = \left(\frac{1}{2} bh\right) \cdot 4 \cdot 3.46 \cdot 6$

$A \approx 6.92 \cdot 6$ or about 41.52

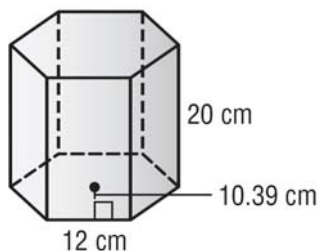To determine the volume of a regular hexagonal prism, multiply the area of the base and the height.

Exercises
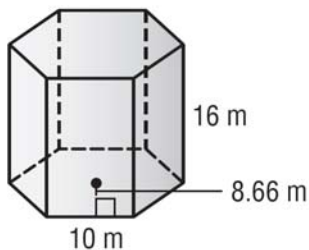**Determine the volume of each regular hexagonal prism. Round to the nearest tenth.**

1.

10 in.

6.93 in.

8 in.

2.

20 cm

10.39 cm

12 cm

3.

16 m

8.66 m

10 m

4.

4 ft

12 ft

13.86 ft