In Exercises 1–3, find the volume of the pyramid.

1. \[
\text{Volume} = \frac{1}{3} \times 
\text{Base Area} \times 
\text{Height} = \frac{1}{3} \times 9 \times 10 \times 16 = 480 \text{ m}^3
\]

2. \[
\text{Volume} = \frac{1}{3} \times 
\text{Base Area} \times 
\text{Height} = \frac{1}{3} \times 15 \times 13 \times 15 = 303.75 \text{ in}^3
\]

3. \[
\text{Volume} = \frac{1}{3} \times 
\text{Base Area} \times 
\text{Height} = \frac{1}{3} \times 9 \times 7 \times 4 = 84 \text{ ft}^3
\]

In Exercises 4–6, find the indicated measure.

4. A pyramid with a square base has a volume of 320 cubic centimeters and a height of 15 centimeters. Find the side length of the square base.

5. A pyramid with a rectangular base has a volume of 60 cubic feet and a height of 6 feet. The width of the rectangular base is 4 feet. Find the length of the rectangular base.

6. A pyramid with a triangular base has a volume of 80 cubic meters and a base area of 20 square meters. Find the height of the pyramid.

In Exercises 7 and 8, the pyramids are similar. Find the volume of Pyramid B.

7. \[
\text{Volume of Pyramid A} = 500 \text{ in}^3
\]

8. \[
\text{Volume of Pyramid B} = \frac{1}{27} \times \text{Volume of Pyramid A} = \frac{1}{27} \times 500 = 18.52 \text{ mm}^3
\]

In Exercises 9–11, find the volume of the composite solid.

9. \[
\text{Volume} = \text{Volume of the cube} = 9 \times 8 \times 8 = 576 \text{ yd}^3
\]

10. \[
\text{Volume} = \text{Volume of the rectangular prism} = 6 \times 5 \times 16.5 = 195 \text{ m}^3
\]

11. \[
\text{Volume} = \text{Volume of the rectangular prism} = 12 \times 10 \times 10 = 1200 \text{ cm}^3
\]

12. The Pyramid Arena in Memphis, Tennessee is about 98 meters tall and has a square base with a side length of about 180 meters. A prism-shaped building has the same square base as the Pyramid Arena. What is the height of the building if it has the same volume as the Pyramid Arena?
11.6 Practice B

In Exercises 1–3, find the volume of the pyramid.

1. 10 cm
   \[ V = \frac{1}{3} \times \text{base area} \times \text{height} \]

2. 7 ft
   \[ V = \frac{1}{3} \times \text{base area} \times \text{height} \]

3. 16 yd
   \[ V = \frac{1}{3} \times \text{base area} \times \text{height} \]

In Exercises 4 and 5, find the indicated measure.

4. A pyramid with a square base has a volume of 119.07 cubic meters and a height of 9 meters. Find the side length of the square base.

5. A pyramid with a hexagonal base has a volume of about 1082.54 cubic inches and a base area of about 259.81 square inches. Find the height of the pyramid.

In Exercises 6 and 7, the pyramids are similar. Find the volume of Pyramid B.

6. Pyramid A
   \[ V = \frac{1}{3} \times \text{base area} \times \text{height} \]

7. Pyramid B
   \[ V = \frac{1}{3} \times \text{base area} \times \text{height} \]

In Exercises 8–10, find the volume of the composite solid.

8. 5 cm
   \[ V = \text{volume of prism} + \text{volume of pyramid} \]

9. 16 in.
   \[ V = \text{volume of prism} + \text{volume of pyramid} \]

10. 10 m
    \[ V = \text{volume of prism} + \text{volume of pyramid} \]

11. The volume of the pyramid shown is \(48\sqrt{3}\) cubic meters. Find the value of \(x\).