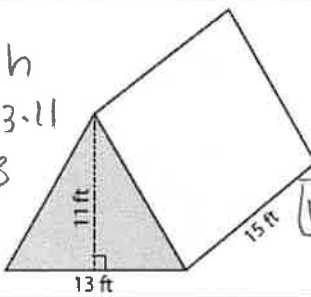
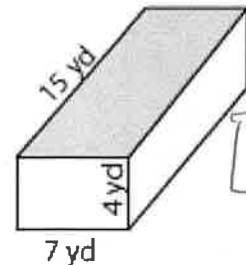
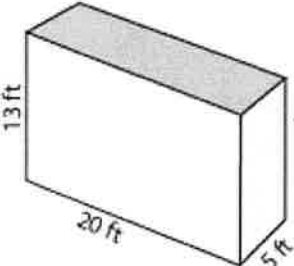
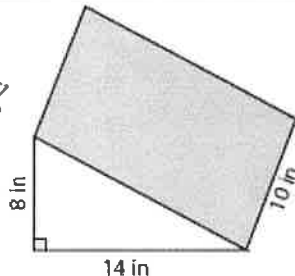


7th Grade Test Review: Volume

Directions: Show your work for each problem.

For questions 1-4, find the volume of each prism.

<p>1) $B = \frac{1}{2}bh$ $B = \frac{1}{2} \cdot 13 \cdot 11$ $B = \frac{1}{2} \cdot 143$ $B = 71.5$</p>  <p style="text-align: right;">$V = Bh$ $V = 71.5 \cdot 15$ $V = 1072.5 \text{ ft}^3$</p>	<p>2) $B = bh$ $B = 7 \cdot 4$ $B = 28$</p>  <p style="text-align: right;">$V = Bh$ $V = 28 \cdot 15$ $V = 420 \text{ yd}^3$</p>
<p>3) $B = bh$ $B = 20 \cdot 5$ $B = 100$</p>  <p style="text-align: right;">$V = Bh$ $V = 100 \cdot 13$ $V = 1300 \text{ ft}^3$</p>	<p>4) $B = \frac{1}{2}bh$ $B = \frac{1}{2} \cdot 14 \cdot 8$ $B = 56$</p>  <p style="text-align: right;">$V = Bh$ $V = 56 \cdot 10$ $V = 560 \text{ in}^3$</p>

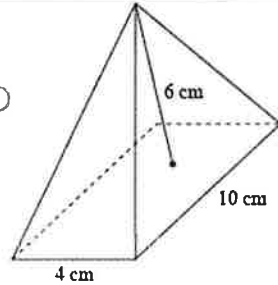
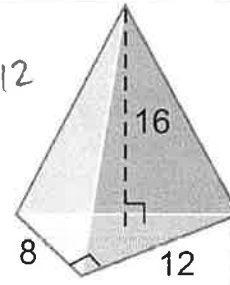
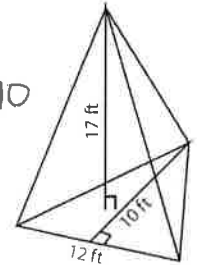
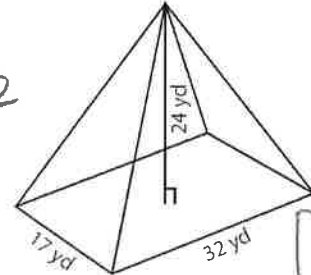
5) Christine bought a new dress. The box the dress came in is the shape of a rectangular prism. The area of the base is 90 square inches. If the volume of the box is 1125 cubic inches, what is the height of the box?

For questions 6-9, find the volume of each pyramid.

$$V = Bh$$

$$1125 = \frac{90h}{1}$$

$$h = 12.5 \text{ in}$$

<p>6) $B = bh$ $B = 4 \cdot 10$ $B = 40$</p>  <p style="text-align: right;">$V = \frac{Bh}{3}$ $V = \frac{40 \cdot 6}{3}$ $V = \frac{240}{3}$ $V = 80 \text{ cm}^3$</p>	<p>7) $B = \frac{1}{2}bh$ $B = \frac{1}{2} \cdot 8 \cdot 12$ $B = 48$</p>  <p style="text-align: right;">$V = \frac{Bh}{3}$ $V = \frac{48 \cdot 16}{3}$ $V = \frac{768}{3}$ $V = 256$</p>
<p>8) $B = \frac{1}{2}bh$ $B = \frac{1}{2} \cdot 12 \cdot 10$ $B = 60$</p>  <p style="text-align: right;">$V = \frac{Bh}{3}$ $V = \frac{60 \cdot 17}{3}$ $V = \frac{1020}{3}$ $V = 340 \text{ ft}^3$</p>	<p>9) $B = bh$ $B = 17 \cdot 32$ $B = 544$</p>  <p style="text-align: right;">$V = \frac{Bh}{3}$ $V = \frac{544 \cdot 24}{3}$ $V = \frac{13056}{3}$ $V = 4352 \text{ yd}^3$</p>

10) A triangular pyramid has a height of 15 meters. If the triangle has a base of 9 meters and a height of 10 meters, what is the volume of the pyramid?

$$V = \frac{Bh}{3}$$

$$B = \frac{1}{2} \cdot 9 \cdot 10$$

$$B = 45$$

$$V = \frac{45 \cdot 15}{3}$$

$$V = \frac{675}{3}$$

$$V = 225 \text{ m}^3$$