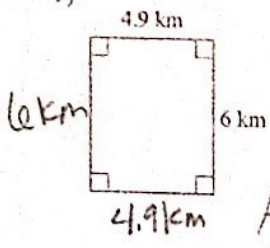


G1: Test Review - C Level

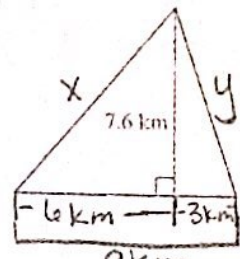
Find the area and perimeter of each shape.

1)



$P = 4.9\text{ km} + 4.9\text{ km} + 6\text{ km} + 6\text{ km}$
 $P = 21.8\text{ km}$
 $A = (4.9\text{ km})(6\text{ km})$
 $A = 29.4\text{ km}^2$

2)

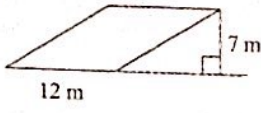


$(6\text{ km})^2 + (7.6\text{ km})^2 = x^2$
 $36\text{ km}^2 + 57.76\text{ km}^2 = x^2$
 $\sqrt{x^2} = \sqrt{93.76\text{ km}^2}$
 $x \approx 9.68\text{ km}$
 $x^2 = (7.6\text{ km})^2 + (3\text{ km})^2$
 $x^2 = 57.76\text{ km}^2 + 9\text{ km}^2$
 $\sqrt{x^2} = \sqrt{66.76\text{ km}^2}$
 $x \approx 8.17\text{ km}$
 $P = 9\text{ km} + 8.17\text{ km} + 9.68\text{ km} = 26.85\text{ km} = P$

$A = \frac{(7.6\text{ km})(9\text{ km})}{2}$
 $A = 34.2\text{ km}^2$

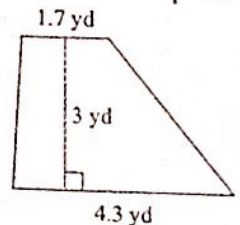
Find the area each shape.

3)



$A = 12\text{ m}(7\text{ m})$
 $A = 84\text{ m}^2$

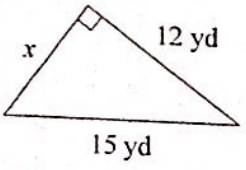
4)



$A = \frac{(1.7\text{ yd} + 4.3\text{ yd}) \cdot 3\text{ yd}}{2}$
 $A = \frac{6\text{ yd} \cdot 3\text{ yd}}{2} = 9\text{ yd}^2 = A$

Find the missing side of the triangle. Round your answers to the nearest hundredth if necessary.

5)



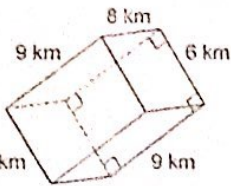
$(12\text{ yd})^2 + x^2 = (15\text{ yd})^2$
 $144\text{ yd}^2 + x^2 = 225\text{ yd}^2$
 -144 yd^2
 $x^2 = 81\text{ yd}^2$
 $x = 9\text{ yd}$

6) Find the area and perimeter of the triangle in #5.

$A = \frac{9\text{ yd}(12\text{ yd})}{2} = 54\text{ yd}^2 = A$
 $P = 9\text{ yd} + 12\text{ yd} + 15\text{ yd}$
 $P = 36\text{ yd}$

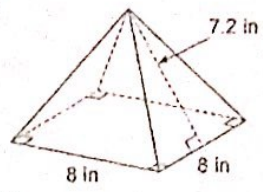
Find the surface area of each figure. Round your answers to the nearest hundredth, if necessary.

7)



$$\begin{aligned}
 & 9 \text{ km} \times 9 \text{ km} \times 2 = 108 \text{ km}^2 \\
 & 6 \text{ km} \times 8 \text{ km} \times 2 = 96 \text{ km}^2 \\
 & 8 \text{ km} \times 9 \text{ km} \times 2 = 144 \text{ km}^2 \\
 & \boxed{SA = 348 \text{ km}^2}
 \end{aligned}$$

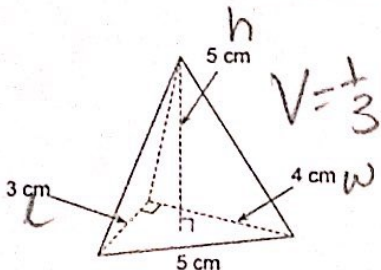
8)



$$\begin{aligned}
 & \text{Base Area} = 8 \text{ in} \times 8 \text{ in} = 64 \text{ in}^2 \\
 & \text{Face Area} = \frac{1}{2} \times 8 \text{ in} \times 7.2 \text{ in} = 28.8 \text{ in}^2 \\
 & \text{Total SA} = 64 \text{ in}^2 + 4 \times 28.8 \text{ in}^2 = 179.2 \text{ in}^2 \\
 & \boxed{SA = 179.2 \text{ in}^2}
 \end{aligned}$$

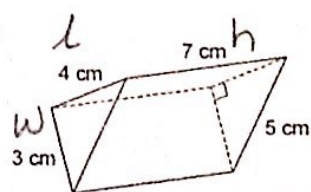
Find the volume of each figure. Round your answers to the nearest hundredth, if necessary.

9)



$$\begin{aligned}
 & V = \frac{1}{3} (\text{Area of base}) \cdot h \\
 & V = \frac{1}{3} \left(\frac{3 \text{ cm} \cdot 4 \text{ cm}}{2} \right) \cdot 5 \text{ cm} \\
 & V = 10 \text{ cm}^3
 \end{aligned}$$

10)



$$\begin{aligned}
 & V = \frac{1}{2} \cdot l \cdot w \cdot h \\
 & V = \frac{1}{2} \cdot 3 \text{ cm} \cdot 4 \text{ cm} \cdot 7 \text{ cm} \\
 & V = 42 \text{ cm}^3
 \end{aligned}$$