

Name

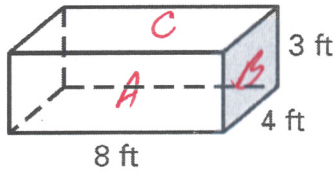
Answers

Date

Geometry – Surface Area of Prisms

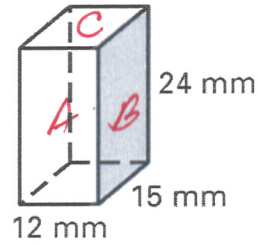
Find the surface area of each prism.

1)



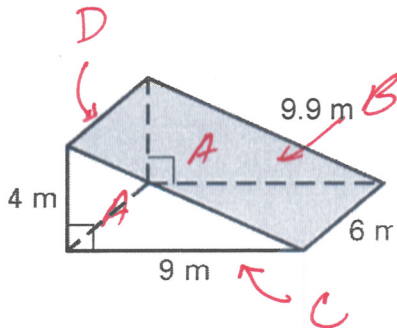
$$\begin{aligned}
 A &= 24 \times 2 = 48 \\
 B &= 12 \times 2 = 24 \\
 C &= 32 \times 2 = 64 \\
 \hline
 &136 \text{ ft}^2
 \end{aligned}$$

2)



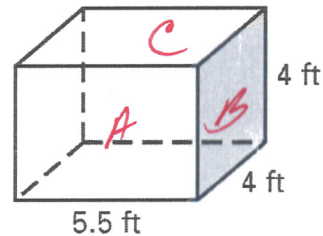
$$\begin{aligned}
 A &= 288 \times 2 = 576 \\
 B &= 360 \times 2 = 720 \\
 C &= 180 \times 2 = 360 \\
 \hline
 &1656 \text{ mm}^2
 \end{aligned}$$

3)



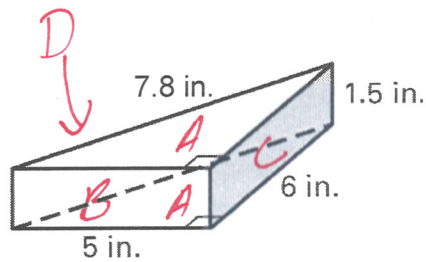
$$\begin{aligned}
 A &= 18 \times 2 = 36 \\
 B &= 59.4 \\
 C &= 54 \\
 D &= 24 \\
 \hline
 &173.4 \text{ m}^2
 \end{aligned}$$

4)



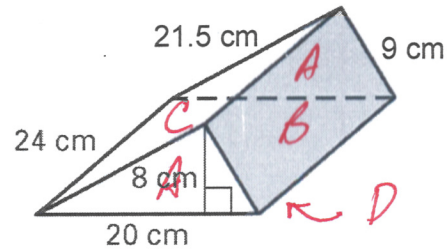
$$\begin{aligned}
 A &= 22 \times 2 = 44 \\
 B &= 16 \times 2 = 32 \\
 C &= 22 \times 2 = 44 \\
 \hline
 &120 \text{ ft}^2
 \end{aligned}$$

5)



$$\begin{aligned}
 A &= 15 \times 2 = 30 \\
 B &= 7.5 \\
 C &= 9 \\
 D &= 11.7 \\
 \hline
 &58.2 \text{ in}^2
 \end{aligned}$$

6)



$$\begin{aligned}
 A &= 80 \times 2 = 160 \\
 B &= 216 \\
 C &= 516 \\
 D &= 480 \\
 \hline
 &1372 \text{ cm}^2
 \end{aligned}$$

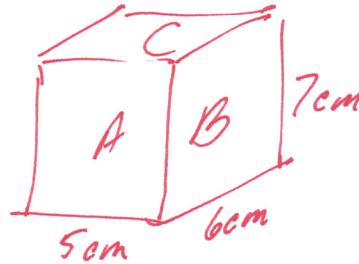
Make a sketch of the rectangular prism with the given dimensions. Then find its surface area.

7) length = 2 in., width = 2 in., height = 3 in.



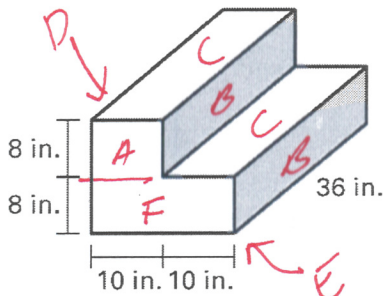
$$\begin{aligned}
 A &= 6 \times 2 = 12 \\
 B &= 6 \times 2 = 12 \\
 C &= 4 \times 2 = 8 \\
 \hline
 &32 \text{ in}^2
 \end{aligned}$$

8) length = 5 cm, width = 6 cm, height = 7 cm



$$\begin{aligned}
 A &= 35 \times 2 = 70 \\
 B &= 42 \times 2 = 84 \\
 C &= 30 \times 2 = 60 \\
 \hline
 &214 \text{ cm}^2
 \end{aligned}$$

9) Find the surface area of the figure.



$$\begin{aligned}
 A &= 80 \times 2 = 160 \\
 B &= 288 \times 2 = 576 \\
 C &= 360 \times 2 = 720 \\
 D &= 16 \times 36 = 576 \\
 E &= 20 \times 36 = 720 \\
 F &= 160 \times 2 = 320 \\
 \hline
 &3072 \text{ in}^2
 \end{aligned}$$