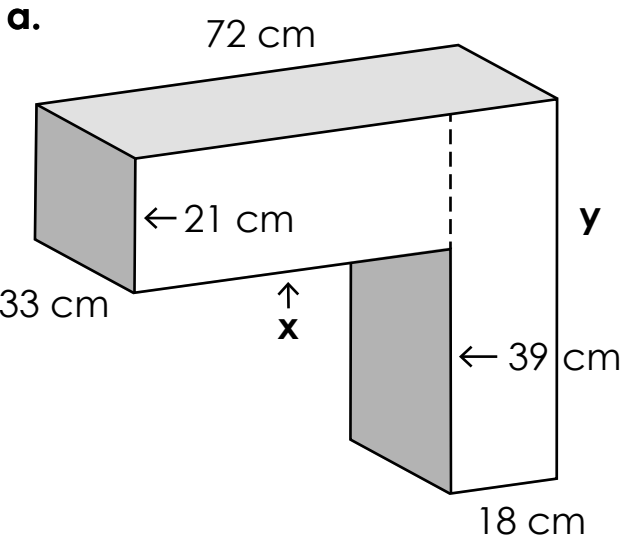


Name: _____

Volume of Composite Figures

Find the missing lengths and the volume of each solid figure.



$x = \underline{\hspace{1cm}} \text{ cm} \quad y = \underline{\hspace{1cm}} \text{ cm}$

Volume of part 1:

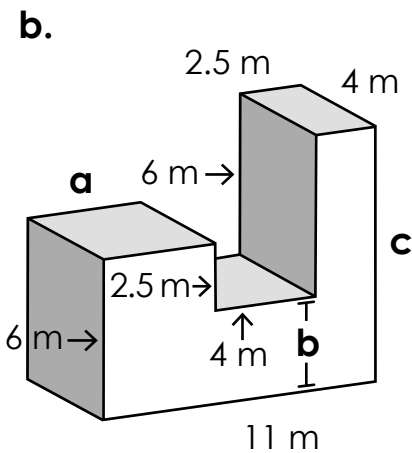
$\underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \text{ cm}^3$

Volume of part 2:

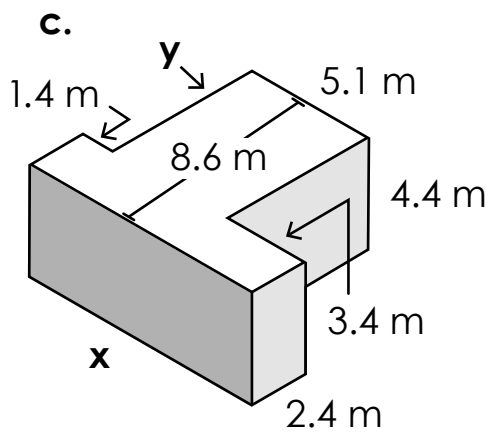
$\underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \text{ cm}^3$

Volume of shape:

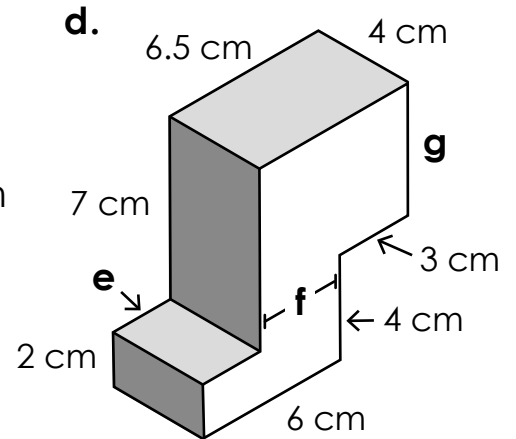
$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \text{ cm}^3$



$a = \underline{\hspace{1cm}} \quad b = \underline{\hspace{1cm}} \quad c = \underline{\hspace{1cm}}$



$x = \underline{\hspace{1cm}} \quad y = \underline{\hspace{1cm}}$

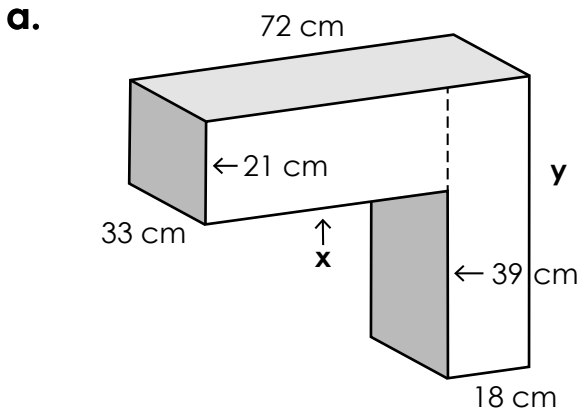


$e = \underline{\hspace{1cm}} \quad f = \underline{\hspace{1cm}} \quad g = \underline{\hspace{1cm}}$

ANSWER KEY

Volume of Composite Figures

Find the missing lengths and the volume of each solid figure.



$$x = \underline{54} \text{ cm} \quad y = \underline{60} \text{ cm}$$

Volume of part 1:

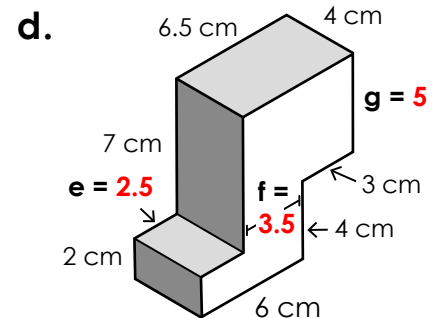
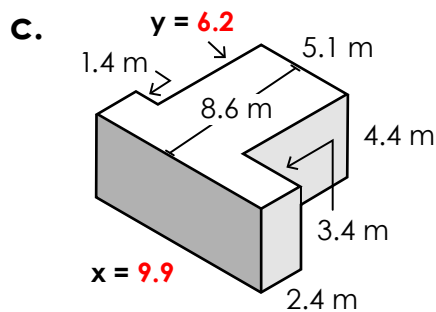
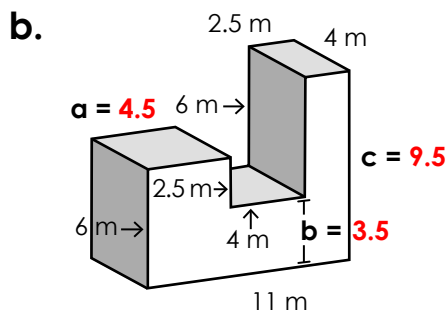
$$\underline{X} \times \underline{21} \times \underline{33} = \underline{37,442} \text{ cm}^3$$


Volume of part 2:

$$\underline{Y} \times \underline{18} \times \underline{33} = \underline{35,640} \text{ cm}^3$$

Volume of shape:


$$\underline{37,442} + \underline{35,640} = \underline{73,082} \text{ cm}^3$$






$$\begin{aligned} 4 \times 4.5 \times 6 &= 108 \text{ m}^3 \\ 3.5 \times 4 \times 4 &= 56 \text{ m}^3 \\ 2.5 \times 4 \times 9.5 &= 95 \text{ m}^3 \\ 108 \times 56 \times 95 &= 259 \text{ m}^3 \end{aligned}$$

or




$$\begin{aligned} 2.5 \times 4 \times 4.5 &= 45 \text{ m}^3 \\ 3.5 \times 4 \times 8.5 &= 119 \text{ m}^3 \\ 2.5 \times 4 \times 9.5 &= 95 \text{ m}^3 \\ 45 \times 119 \times 95 &= 259 \text{ m}^3 \end{aligned}$$

or

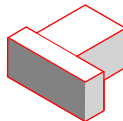


$$\begin{aligned} 2.5 \times 4 \times 4.5 &= 45 \text{ m}^3 \\ 3.5 \times 4 \times 11 &= 154 \text{ m}^3 \\ 2.5 \times 4 \times 6 &= 60 \text{ m}^3 \\ 45 \times 154 \times 60 &= 259 \text{ m}^3 \end{aligned}$$

or



$$\begin{aligned} 4 \times 4.5 \times 6 &= 108 \text{ m}^3 \\ 3.5 \times 4 \times 6.5 &= 91 \text{ m}^3 \\ 2.5 \times 4 \times 6 &= 60 \text{ m}^3 \\ 108 \times 91 \times 60 &= 259 \text{ m}^3 \end{aligned}$$

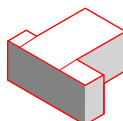


$$2.4 \times 4.4 \times 9.9 = 104.544 \text{ m}^3$$

$$4.4 \times 5.1 \times 6.2 = 139.128 \text{ m}^3$$

$$104.544 + 139.128 = 243.672 \text{ m}^3$$

or



$$1.4 \times 2.4 \times 4.4 = 14.784 \text{ m}^3$$

$$4.4 \times 5.1 \times 8.6 = 192.984 \text{ m}^3$$

$$2.4 \times 3.4 \times 4.4 = 35.904 \text{ m}^3$$

$$14.784 + 192.984 + 35.904 = 243.672 \text{ m}^3$$



$$\begin{aligned} 2 \times 2.5 \times 4 &= 20 \text{ cm}^3 \\ 3.5 \times 4 \times 9 &= 126 \text{ cm}^3 \\ 3 \times 4 \times 5 &= 60 \text{ cm}^3 \\ 20 \times 126 \times 60 &= 206 \text{ cm}^3 \end{aligned}$$

or



$$\begin{aligned} 2 \times 2.5 \times 4 &= 20 \text{ cm}^3 \\ 3.5 \times 4 \times 4 &= 56 \text{ cm}^3 \\ 4 \times 5 \times 6.5 &= 130 \text{ cm}^3 \\ 20 \times 56 \times 130 &= 206 \text{ cm}^3 \end{aligned}$$

or



$$\begin{aligned} 4 \times 5 \times 6.5 &= 130 \text{ cm}^3 \\ 2 \times 3.5 \times 4 &= 28 \text{ cm}^3 \\ 2 \times 4 \times 6 &= 48 \text{ cm}^3 \\ 130 \times 28 \times 48 &= 206 \text{ cm}^3 \end{aligned}$$

or



$$\begin{aligned} 2 \times 4 \times 6 &= 48 \text{ m}^3 \\ 3.5 \times 4 \times 7 &= 98 \text{ m}^3 \\ 3 \times 4 \times 5 &= 60 \text{ cm}^3 \\ 48 \times 98 \times 60 &= 206 \text{ cm}^3 \end{aligned}$$