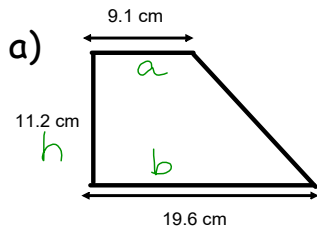


Ex. 1: Find the area of each composite shape.



Strategy #1



Split the shape into known shapes.
Use rectangles, triangles, circles, semi-circles.

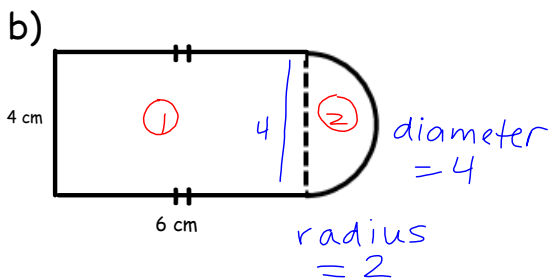
$$A = \frac{(a+b)h}{2}$$

Bracket 1st

$$= \frac{(9.1 + 19.6)(11.2)}{2}$$

$$= 160.7 \text{ cm}^2$$

OR $A = \frac{1}{2}(a+b)h$



$A(\text{rect})$

$$A① = lw$$

$$= (4)(6)$$

$$= 24$$

$$A② = \pi r^2 \div 2$$

$$= \pi (2)^2 \div 2$$

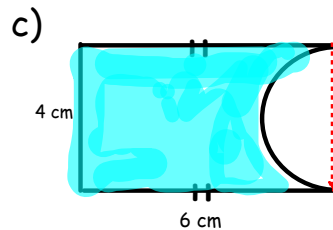
$$\boxed{\pi} \times 2 \boxed{y^x} 2 \div 2$$

$$= 6.3$$

Total Area

$$= 24 + 6.3$$

$$= 30.3 \text{ cm}^2$$

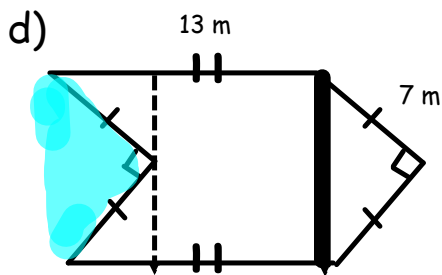


rectangle - semicircle

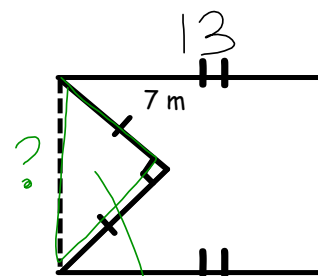
$$= 24 - 6.3$$

$$= 17.7 \text{ cm}^2$$

Ex. 1 cont'd: Find the area of each composite shape.



Redrawn



$$\begin{aligned}
 A &= lw \\
 &= 13(9.9) \\
 &= 128.7 \text{ m}^2
 \end{aligned}$$

$$a^2 + b^2 = c^2$$

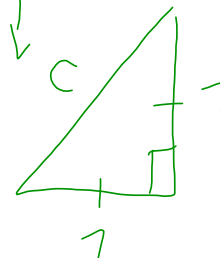
$$7^2 + 7^2 = c^2$$

$$49 + 49 = c^2$$

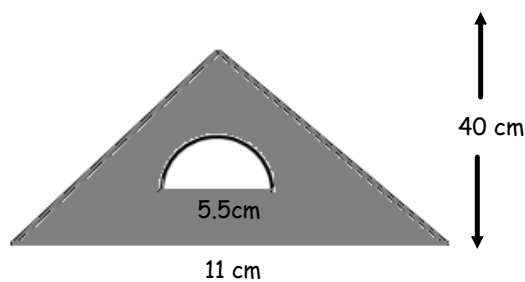
$$98 = c^2$$

$$\sqrt{98} = c$$

$$9.9 = c$$



Ex. 2: Find the area of the shaded region.



$$\text{diameter} = 5.5$$

$$\begin{aligned}\text{radius} &= 5.5 \div 2 \\ &= 2.75\end{aligned}$$

$$\begin{aligned}A(\text{triangle}) &= \frac{bh}{2} \\ &= \frac{(11)(40)}{2} \\ &= 220 \text{ cm}^2\end{aligned}$$

$$\begin{aligned}A(\text{semi-circle}) &= \pi r^2 \div 2 \\ &= \pi (2.75)^2 \div 2 \\ &= 11.9\end{aligned}$$

$$\begin{aligned}A_{\text{shaded}} &= 220 - 11.9 \\ &= 208.1 \text{ cm}^2\end{aligned}$$

In class work to be handed in
before you leave

page 13 # 3 - 6

