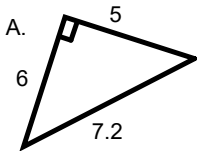


Warm-Up

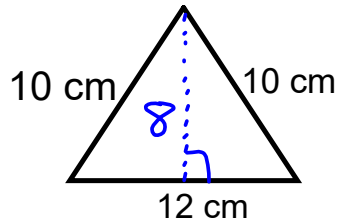
November 28, 2019

Height of triangle

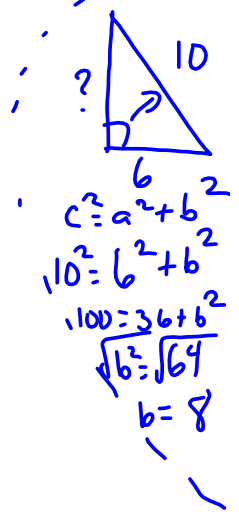
What is the area of the triangle?



$$\begin{aligned}
 A &= \frac{bh}{2} \\
 &= \frac{6 \times 5}{2} \\
 &= \frac{30}{2} \\
 &= 15
 \end{aligned}$$

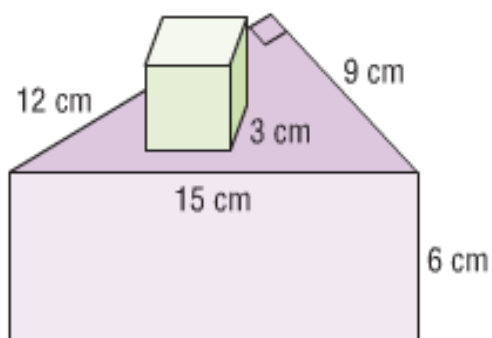


$$\begin{aligned}
 A &= \frac{bh}{2} \\
 &= \frac{8 \times 12}{2} \\
 &= \frac{96}{2} \\
 &= 48 \text{ cm}^2
 \end{aligned}$$



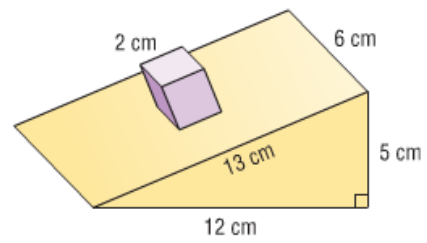
$$\begin{aligned}
 c^2 &= a^2 + b^2 \\
 10^2 &= 6^2 + b^2 \\
 100 &= 36 + b^2 \\
 \sqrt{b^2} &= \sqrt{64} \\
 b &= 8
 \end{aligned}$$

d) cube on a triangular prism

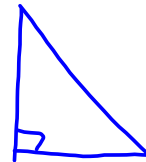


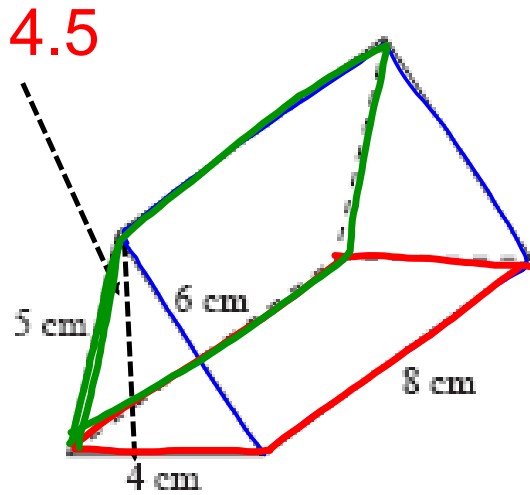
360 cm^2

e) cube on a triangular prism

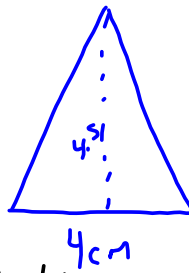


256 cm^2





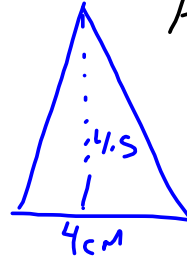
- Draw the faces ^{v5}
- Find the surface area



$$A = \frac{bh}{2}$$

$$= \frac{4.5 \times 4}{2}$$

$$= 9$$

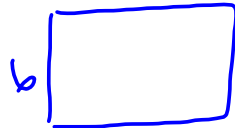


$$A = \frac{bh}{2}$$

$$= \frac{4.5 \times 4}{2}$$

$$= \frac{18}{2}$$

$$= 9$$



$$A = bh$$

$$= 6 \times 8$$

$$= 48$$



$$A = bh$$

$$= 4 \times 8$$

$$= 32$$



$$A = bh$$

$$= 5 \times 8$$

$$= 40$$

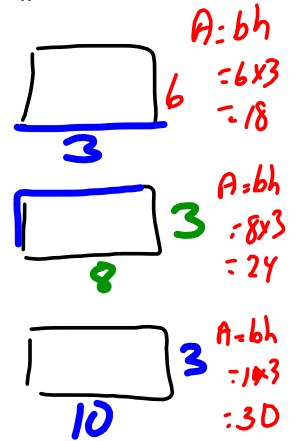
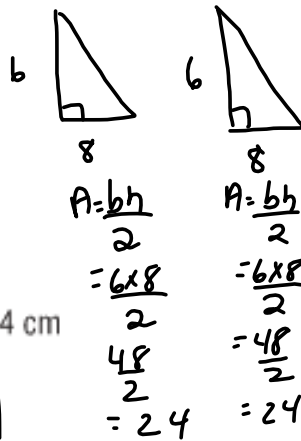
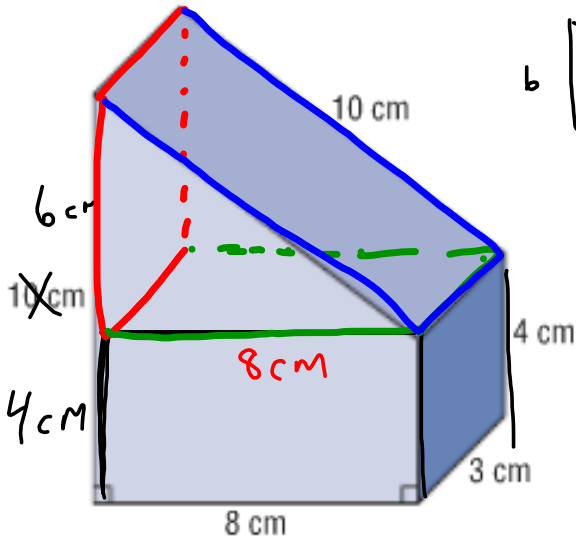
120

$$SA = 120 + 18$$

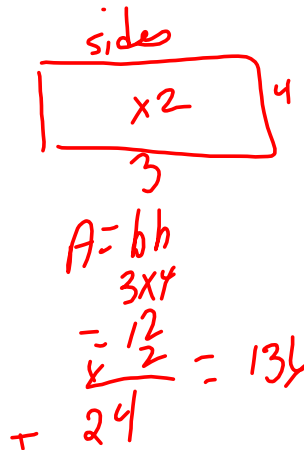
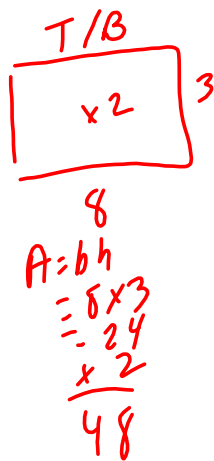
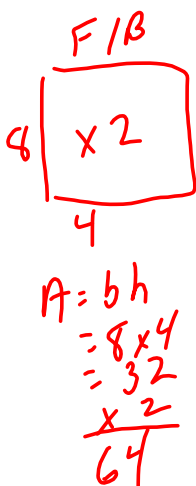
$$= 138 \text{ cm}^2$$

Determine the surface area of this object.

Triangular Prism.



$SA = 48 + 72 = 120 \text{ cm}^2$

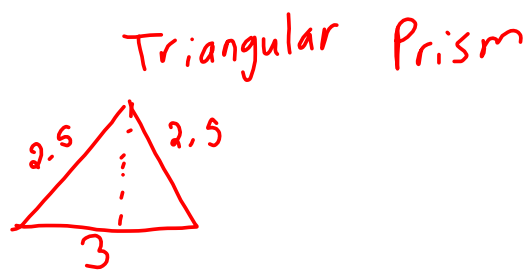
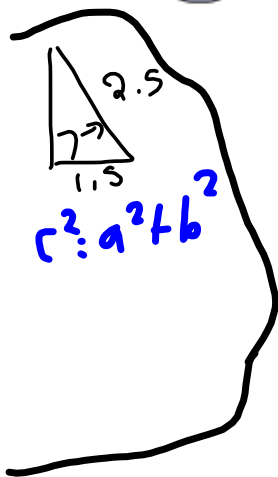
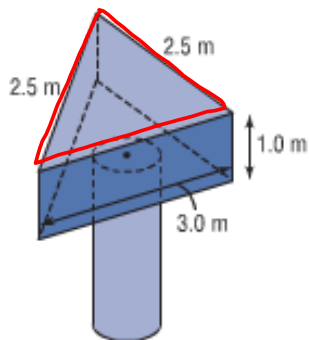


$TSA = 120 + 36 + 48$
 204 cm^2

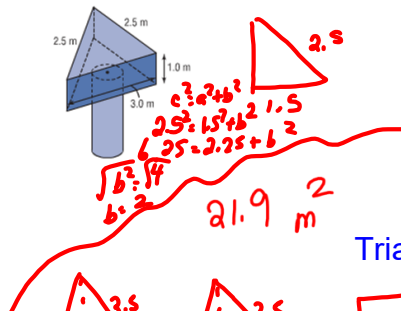
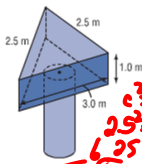
5. Determine the surface area of each composite object.

a) The cylinder is 2.5 m long with radius 0.5 m.

$$\text{Cylinder SA} = 2\pi r^2 + 2\pi r h$$



5. Determine the surface area of each composite object.
 a) The cylinder is 2.5 m long with radius 0.5 m.



Cylinder

$$SA = 2\pi r^2 + 2\pi rh$$

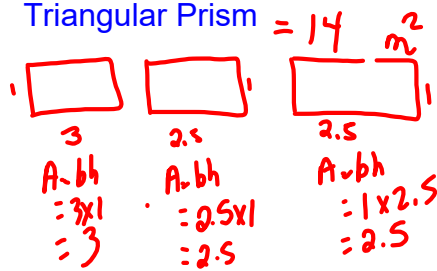
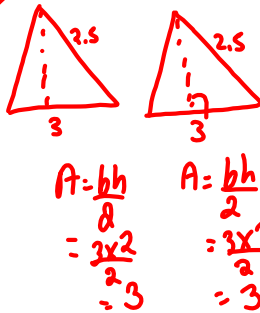
$$= 2(3.14)(0.5)^2 + 2(3.14)(0.5)(2.5)$$

$$= 2(3.14)(0.25) + 7.85$$

$$\rightarrow 1.57 + 7.85$$

$$9.42$$

Triangular Prism



$$TSA = 9.42 + 14$$

$$= 23.42$$

$$- 1.57$$

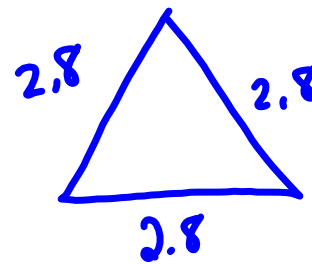
$$\hline 21.9 \text{ m}^2$$

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5[b]

...find the height of triangle first!!!

6



Attachments

page 40 answers.notebook