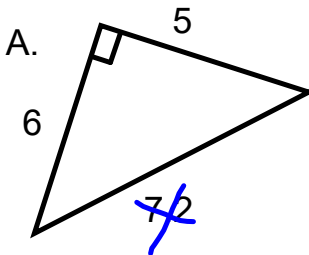


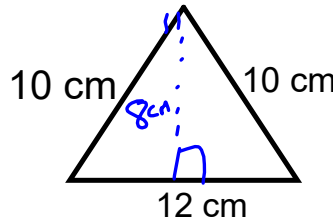
Warm-Up

November 23, 2018

What is the area of the triangle?



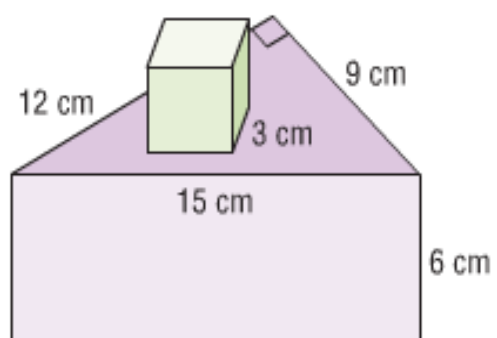
$$\begin{aligned}
 A &= \frac{bh}{2} \\
 &= \frac{6 \times 5}{2} \\
 &= 15
 \end{aligned}$$



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

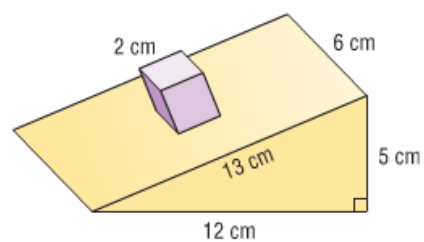
$c^2 = a^2 + b^2$
 $10^2 = 6^2 + b^2$
 $100 = 36 + b^2$
 $\sqrt{b^2} = \sqrt{64}$
 $b = 8$

d) cube on a triangular prism



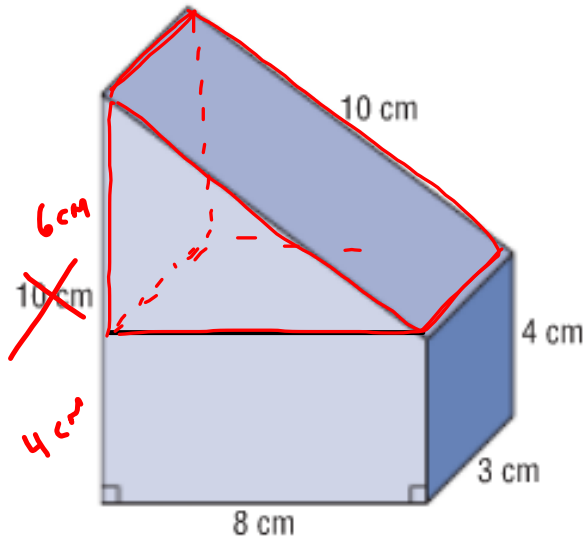
360 cm^2

e) cube on a triangular prism



256 cm^2

Determine the surface area of this object.



Rectangular Prism

	F/B	T/B	Sides
4	$\begin{array}{ c } \hline \times 2 \\ \hline 8 \end{array}$	3	$\begin{array}{ c } \hline \times 2 \\ \hline 6 \end{array}$
	$\bullet = bh$	$\bullet = bh$	$A = bh^4$
	$= 8 \times 4$	$= 8 \times 3$	$= 4 \times 3$
	$= 32$	$= 24$	$= 12$
	$\times 2$	$\times 2$	$\times 2$
	64	48	24

136 cm²

$\begin{array}{|c|} \hline \times 2 \\ \hline \end{array}$

$A = \frac{bh}{2}$
 $= \frac{6 \times 8}{2}$
 $= \frac{48}{2}$
 $= 24$

$A = bh$
 $= 6 \times 3$
 $= 18$

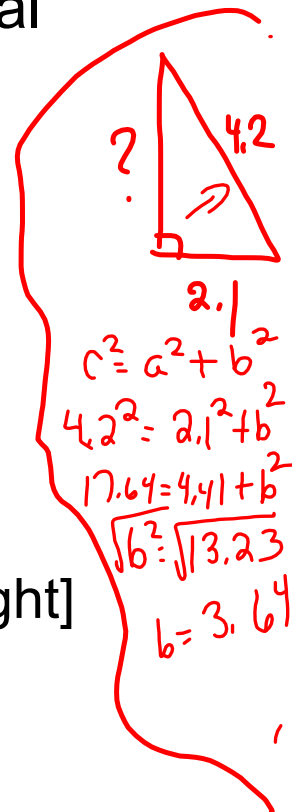
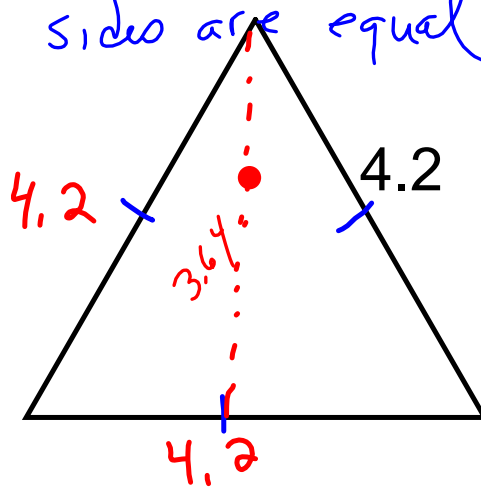
$A = bh$
 $= 8 \times 3$
 $= 24$

$A = bh$
 $= 10 \times 3$
 $= 30$

120

$120 + 136 - 48 = 208 \text{ cm}^2$

What do you know about an equilateral triangle? *All sides are equal*



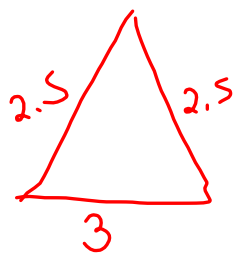
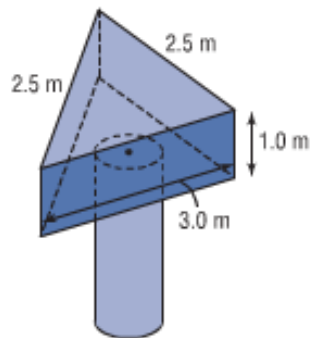
Find the area...[need a base and a height]

$$\begin{aligned}
 A &= \frac{bh}{2} \\
 &= \frac{4.2 \times 3.6}{2} \\
 &= 7.56
 \end{aligned}$$

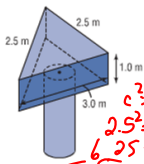
5. Determine the surface area of each composite object.

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

Cylinder • $SA = 2\pi r^2 + 2\pi r h$



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



Handwritten notes for the triangular prism:

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

$$2.5^2 = 1.5^2 + b^2$$

$$6.25 = 2.25 + b^2$$

$$\sqrt{b^2 = 4}$$

$$b = 2$$

Final result: 21.9 m^2

Cylinder

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

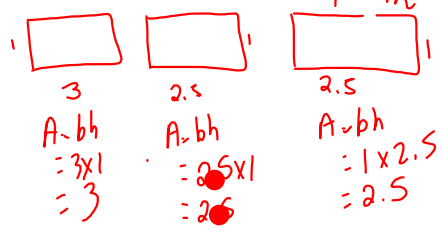
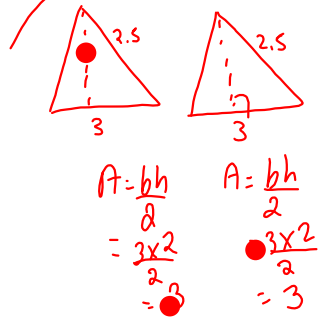
$$= 2(3.14)(0.5)^2 + 2(3.14)(0.5)(2.5)$$

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

$$\rightarrow 1.57 + 7.85$$

$$9.42$$

Triangular Prism = 14 m²



$$TSA = 9.42 + 14$$

$$= 23.42$$

$$- 1.57$$

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

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5[b] ...find the height of triangle first!!!

6

Page 148 # 8 [a,b]

Attachments

page 40 answers.notebook