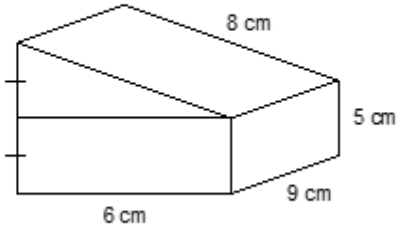
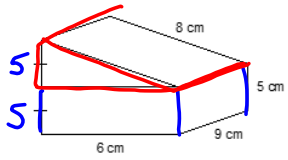
____ 1. This object is composed of a right triangular prism on top of a right rectangular prism. Determir surface area of the object.



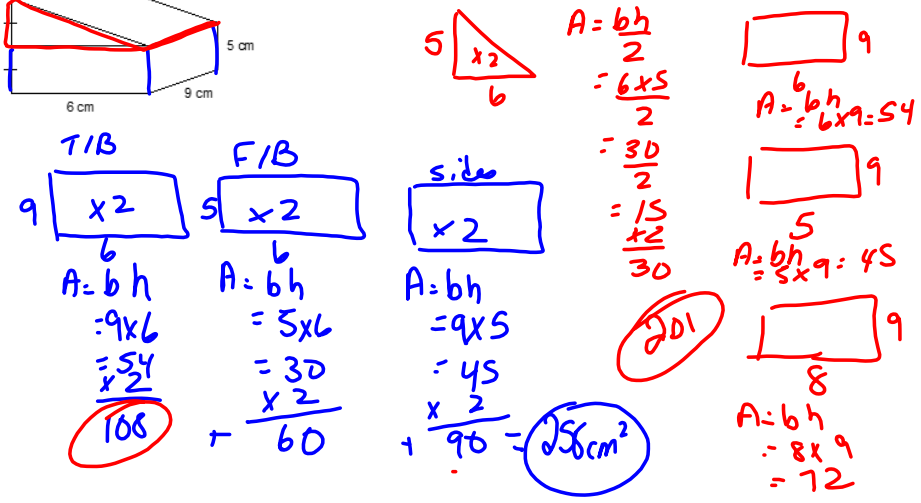
a. 351 cm^2 b. 297 cm^2 c. 207 cm^2 d. 441 cm^2

Warm-Up November 25, 2015

1. This object is composed of a right triangular prism on top of a right rectangular prism. Determine the surface area of the object.



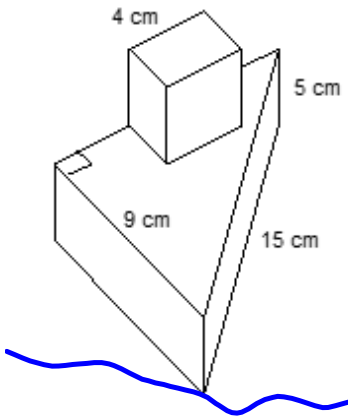
a. 351 cm² b. 297 cm² c. 207 cm² d. 441 cm²



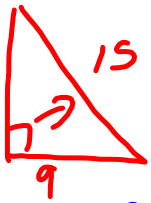
A

258 + 201 = 459
− 108
351 cm²

____ 2. A 4-cm cube is attached to the top of a right triangular prism as shown. Determine the surface area composite object, to the nearest square centimetre.



a. 298 cm² b. 352 cm² c. 336 cm² d. 36



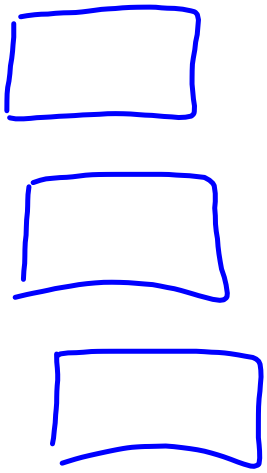
$c^2 = a^2 + b^2$

$15^2 = 9^2 + b^2$

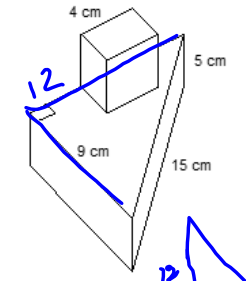
$225 = 81 + b^2$

$\sqrt{b^2} = \sqrt{144}$

$b = 12$



____ 2. A 4-cm cube is attached to the top of a right triangular prism as shown. Determine the surface area of th composite object, to the nearest square centimetre.



a. 298 cm² b. 352 cm² c. 336 cm² d. 368 cm

12

? 15 9

$c^2 = a^2 + b^2$
$15^2 = 9^2 + b^2$
$225 = 81 + b^2$
$144 = b^2$
$b = 12$

12 x2 9

$A = \frac{bh}{2}$
$= \frac{9 \times 12}{2}$
$= \frac{108}{2}$
$= 54 \times 2 = 108$

5 12

$A = bh$
$= 12 \times 5$
$= 60$

5 9

$A = bh$
$= 9 \times 5$
$= 45$

9 15

$A = bh$
$= 15 \times 5$
$= 75$

$180 + 108 = 288$

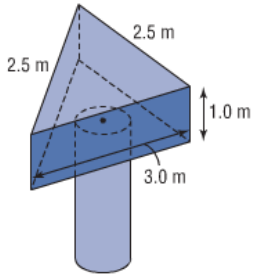
x6 4 4

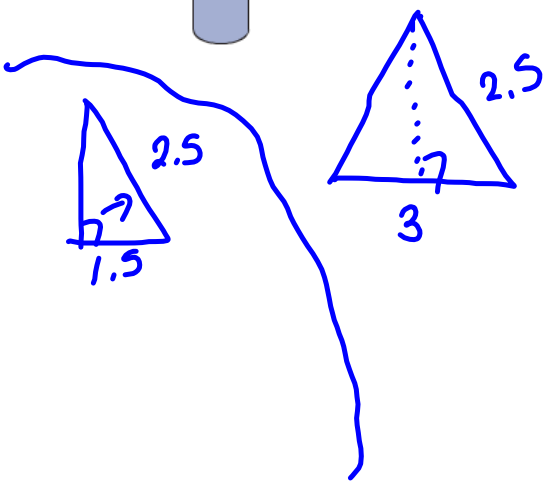
$A = bh$
$= 4 \times 4$
$= 16$ ← x2
$\times 6$
96

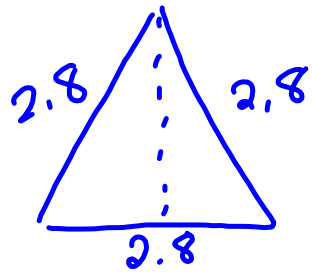
$288 + 96 = 384$
$- 32$

352 cm²

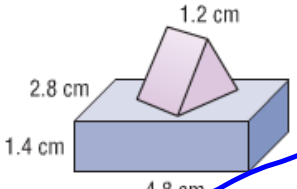
a) The cylinder is 2.5 m long with radius 0.5 m.

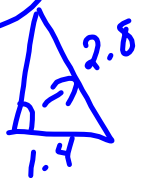




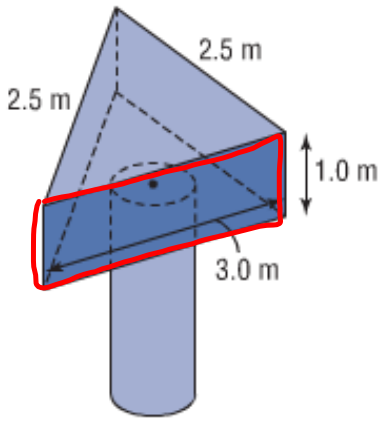


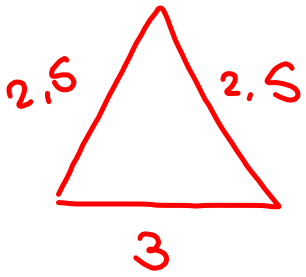
b) The base of the triangular prism is an equilateral triangle with side length 2.8 cm.

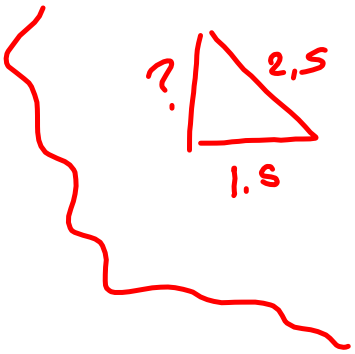




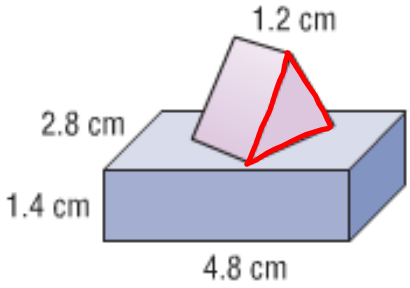
a) The cylinder is 2.5 m long with radius 0.5 m.

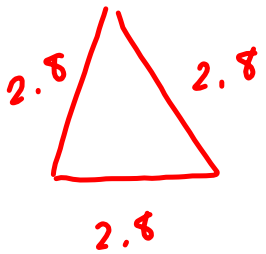






b) The base of the triangular prism is an equilateral triangle with side length 2.8 cm.





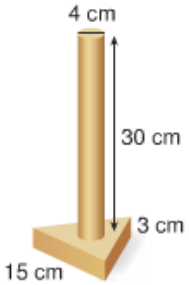
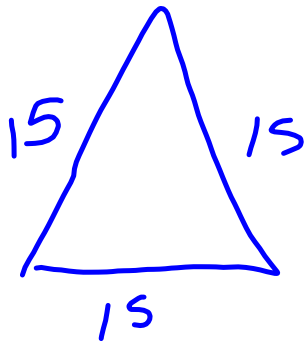
$21.9 m^2$

$58.3 cm^2$

Page 40-41

#5 a, b

#6 $707 cm^2$

Quiz

6. Here is the lamp stand from the top of page 33. The base of the lamp is a triangular prism with an equilateral triangle base. The surface of the stand is to be painted. What is the area that will be painted? Give the answer to the nearest whole number.