

## Curriculum Outcome

(N5) Determine the square root of positive rational numbers that are perfect squares.

(N6) Determine an approximate square root of positive rational numbers that are non-perfect squares.

(SS2) Determine the surface area of composite 3-D objects to solve problems

(N4) \*\*Explain and apply the order of operations, including exponents, with and without technology.\*\*

Warm Up

QUIZ

Again

Separate your desk

- you need a calculator and pencil

# Class/ Homework

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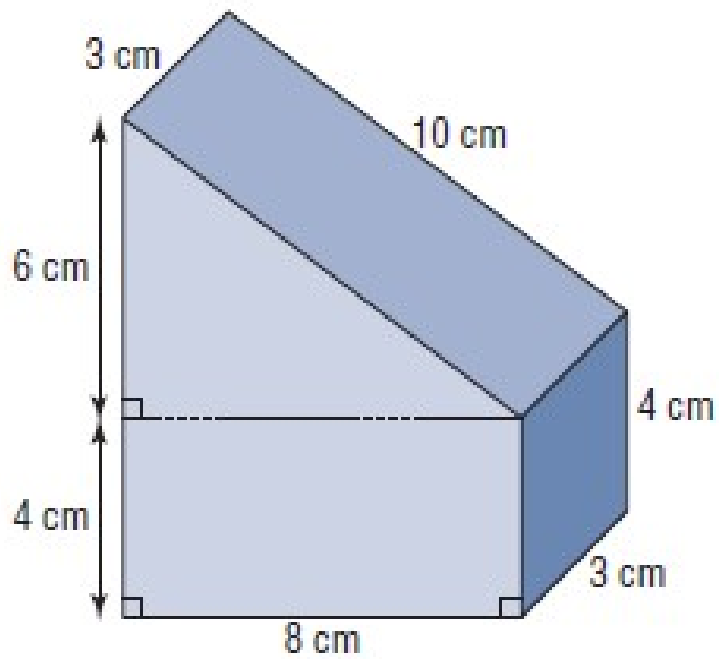
Questions: 8b

**MUST SHOW ALL WORK**

# Warm Up

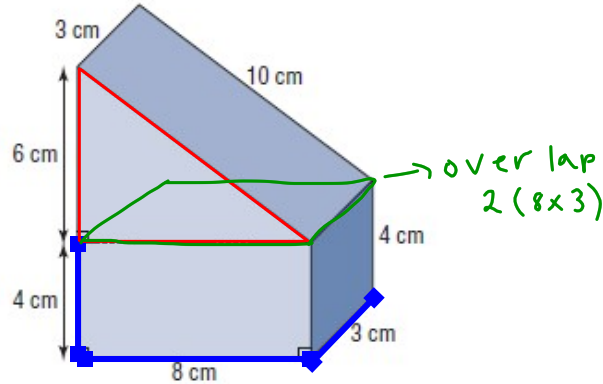


Find the Surface Area (Show all work)





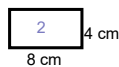
Find the Surface Area (Show all work)



Rectangle Prism

4, 8, 3

Front/Back



$$A_1 = b \times h$$

$$= 8 \times 4$$

$$A_1 = 32 \text{ cm}^2$$

$$2A_1 = 64 \text{ cm}^2$$

Left/Right



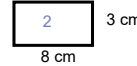
$$A_2 = b \times h$$

$$= 3 \times 4$$

$$A_2 = 12 \text{ cm}^2$$

$$2A_2 = 24 \text{ cm}^2$$

Top/Bottom



$$A_3 = b \times h$$

$$= 8 \times 3$$

$$A_3 = 24 \text{ cm}^2$$

$$2A_3 = 48 \text{ cm}^2$$

Overlap?

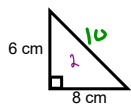
$$SA_2 = 2A_1 + 2A_2 + 2A_3$$

$$= 64 + 24 + 48$$

$$SA_2 = 136 \text{ cm}^2$$

Triangle Prism

Front/Back



$$A_1 = \frac{b \times h}{2}$$

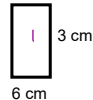
$$= \frac{6 \times 8}{2}$$

$$= \frac{48}{2}$$

$$= 24 \text{ cm}^2$$

$$2A_1 = 48 \text{ cm}^2$$

Left Side

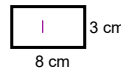


$$A_2 = b \times h$$

$$= 6 \times 3$$

$$A_2 = 18 \text{ cm}^2$$

Bottom

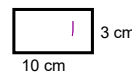


$$A_3 = b \times h$$

$$= 8 \times 3$$

$$A_3 = 24 \text{ cm}^2$$

Top



$$A_4 = b \times h$$

$$= 3 \times 10$$

$$A_4 = 30 \text{ cm}^2$$

$$SA_2 = 48 + 18 + 24 + 30$$

$$= 120 \text{ cm}^2$$

Total Surface Area

$$T_{SA} = SA_1 + SA_2 - \text{overlap}$$

$$= 120 + 136 - 48$$

$$= 208 \text{ cm}^2$$

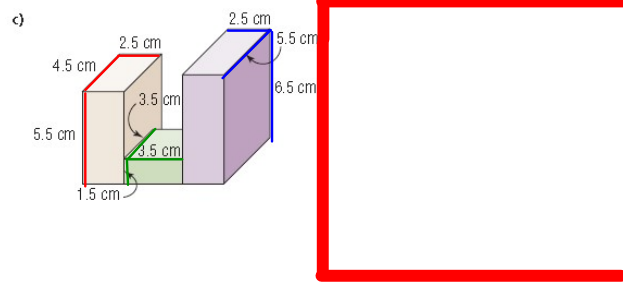
# Class/ Homework

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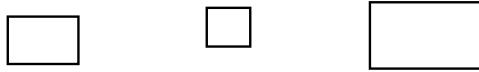
Questions: 8 c  
10

**MUST SHOW ALL WORK**

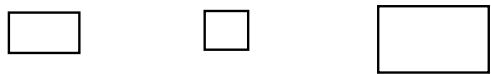
Day 53\_54\_Section 1.4 other composite shapes (Surface area) day 1.notebook November 21, 2019



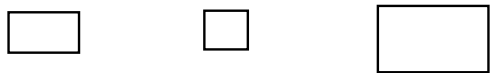
BIG Prism (if alone) Purple



Middle Prism (if alone) Brown



Small Prism (if alone) Brown

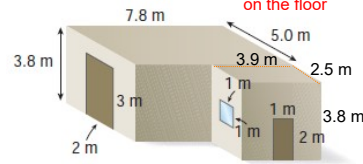


Total Surface Area =

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Day 53\_54\_Section 1.4 other composite shapes (Surface area) day 1.notebook November 21, 2019

10) A garage has the dimension shown. The attached shed has the same height as the garage, but is one-half as long and one-half a width  
 Remember you do not have to put anything on the floor



Step 1) Calculate the sides of all of the larger prism, (Dimensions \_\_\_\_, \_\_\_\_, \_\_\_\_)

Three empty rectangular boxes for writing dimensions.

Step 2) Front building : dimensions \_\_\_\_, \_\_\_\_, \_\_\_\_

Three empty square boxes for writing dimensions.

Step 3) Total warehouse surface area

A large empty rectangular box for writing the total surface area.



b) Vinyl siding costs  $\$15/\text{m}^2$ . The doors, windows, and roof will not be covered with siding. How much will it cost to cover this building with siding?

