First name: \_\_\_\_\_ Last name: \_\_\_\_\_

Student ID: \_\_\_\_\_

## Chapter 8 Geometry 2 (Surface Area) Homework

## **Basic problems**

1. Find the surface area of each solid (use  $\pi = 3.14$ ) Show work! If there is not enough room, please do them on a piece of line paper.

1.



$$a = 6 cm$$

$$b = 16 \text{ cm}$$

2



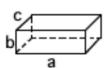
$$a = 12 \text{ m}$$

$$b = 23 \text{ m}$$

$$c = 13 \text{ m}$$

$$d = 13.6 \text{ m}$$

3.



$$a = 12 \text{ cm}$$

$$b = 4 \text{ cm}$$

$$c = 5 \text{ cm}$$

4.



$$a = 2 yd$$

5.



$$a = 3 m$$

$$b = 5 m$$

6.

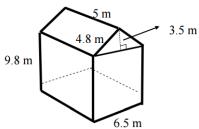


$$a = b = c = 7 \text{ cm}$$

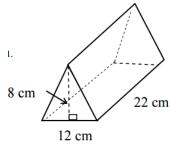
## Word problems:

	Chloe wants to wrap a present in a box for Sarah. The top and bottom of the box is 8 in. by 3 in., the sides are both 3 in. by 2 in. and the front and back are 8 in. by 2 in. How much wrapping paper will Chloe need to wrap the present?
b)	If the paper costs \$0.03 / square inch, how much does Chloe need to spend?
2.	A right circular cone has height 60 centimeters and the base of the radius is 15 centimeters. What is the surface area?
3.	A cone has height 5 feet and the radius of the base is 2 feet. What is the surface area?
4	
4.	Given base of a square pyramid has a side length of 8 m. Its height is 3 m. Find the surface area.

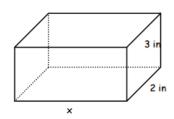
5. Determine the surface area of the house. (Do not include the bottom)



6. Determine the surface area of the isosceles triangular prism.

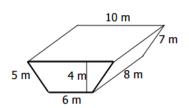


7. If the lateral area of this shape is  $54in^2$ , what is the value of x?



8. Find the surface area of the following shapes.

a)



b)

