

Head

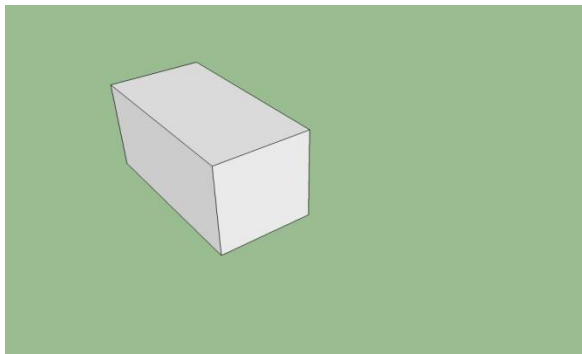
SA= 9.75

V= 4

BH/2 $2 * 1/2 = 1 * 2 = 2$ for one triangle, multiply time two because there is two triangle.

LW $2 * 1 = 2$

To figure out the volume of this hexagon you need to split the hexagon into two triangles and one rectangle as shown in figure 1. After this you'll solve for the area of the triangles and rectangle. You'll use base times height to find the area of the triangles, and you can go ahead and solve for one triangle and multiply times two in order to get the volume for both. Length times width will be used to find the area of the rectangle. To calculate the total volume of the hexagon you'll add your answers.



Face

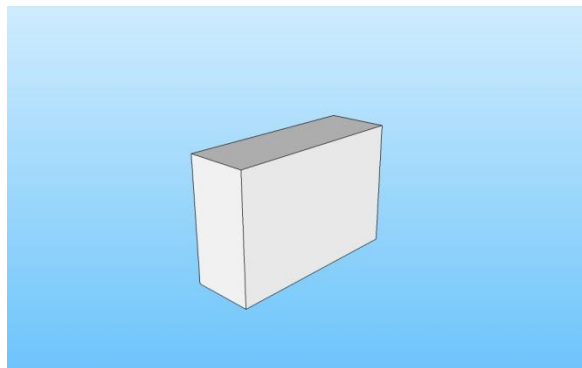
SA= 4

V= 1 1/2

V= B*L*W $V = 1 * 1 1/2 * 1 = 1 1/2$

SA= $1 + 1 1/2 + 1 1/2 + 1 1/2 = 5 1/2$

To find out the surface area we added all of the faces showing the answer will be your surface area the we subtract 1 1/2 because the base will no tbe showing



Legs

SA=11 **(2)**

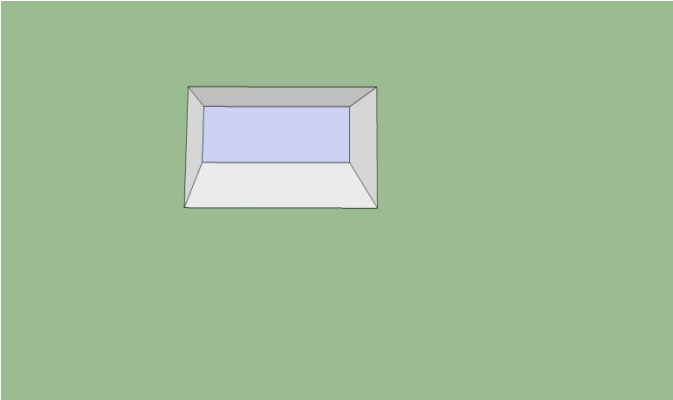
V= 6

V= L*W*H $V = 3 * 1 * 2 = 6$

SA= $2lw + 2wh + 2lh = 2(3)(1) + 2(1)(2) + 2(3)(2) = SA$
 $6 + 4 + 4 = 14 - 3 = 11$

Since the rectangular prism has two sides of each we multiply everything by two and add. For volume it's the length times width and height and you get your volume. Then we subtract three because the bottom of each leg will no be showing.

Body



$$V = L(b_1 + (b_2 - b_1) \frac{h_1}{h} + b_1 (\frac{h_1}{2}))$$

$$V = 5(3 + (4 - 3) \frac{2}{2} + 3) (1)$$

$$5(3 + (1) \frac{2}{2} + 3) (1)$$

$$5(4 + 2 + 3)$$

$$5(4 + 3) (1)$$

$$5(7)$$

$$\mathbf{V = 35}$$

$$\frac{(b_1 + b_2)}{2} * H \quad 5 + 4/2 * H = 9/2 * 2 = 9 * 2 = 18$$

$$\frac{(B_1 + b_2)}{2} * H \quad 3 + 4/2 * H = 7/2 * 2 = 7 * 2 = 14$$

$$3 * 4 = 12 \quad 4 * 5 = 20$$

$$20 + 12 + 18 + 14 = 64 - 12 = 52$$

$$\mathbf{SA = 52}$$

To find the surface area we calculate the surface area of each side and then add it together. Then we subtract by twelve because the bottom will not be showing.