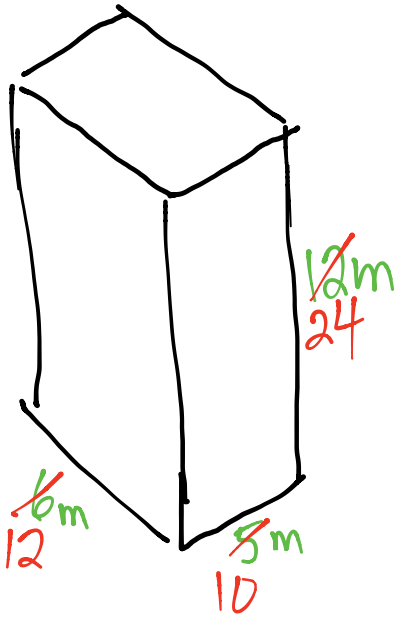


Name \_\_\_\_\_

Date \_\_\_\_\_

A storage shed is a rectangular prism and has dimensions of 6 meters by 5 meters by 12 meters. If Jean were to double these dimensions, she believes she would only double the volume. Is she correct? Explain why or why not. Include a drawing in your explanation.



$$\text{Original Volume} = 6\text{m} \times 5\text{m} \times 12\text{m} = 360\text{m}^3$$

$$\text{New Volume} = 12\text{m} \times 10\text{m} \times 24\text{m} = 2880\text{m}^3$$

We can see that doubling each dimension results in a new volume that is much greater than doubling the original volume.