Recall:
A prism is a $\qquad$ object with $\qquad$ parallel, $\qquad$ polygonal bases. A prism is named by the shape of the $\qquad$ .


A is a $\qquad$ of what a three-dimensional solid would look like if it were taken apart and laid out.

1. Sketch a net of the prism above and label each surface with its dimensions.
2. Which measurements are the same? Is this true for all rectangular prisms or just this one?
3. Find the surface area of each section.

| Top: | Bottom: |
| :--- | :--- |
| Front: | Back: |
| Side: | Side: |

4. Add all of the sections together to find the total surface area of the box.
5. Write a formula for finding the total surface area of the rectangular prism.
6. a) If the box had a triangular base, how would you find the total surface area?

b) Calculate the total surface area given the dimensions?
7. You are building a storage box made out of plywood using the dimensions shown. Plywood costs $\$ 1.50 / \mathrm{ft}^{2}$. Find the total cost of the plywood.

