

Part A: I reviewed Susan's robot.

Use the chart below to evaluate your friend's robot. Measure the lengths and widths of each rectangle. Then calculate the perimeter. Record that information in the table below. If your measurements differ from those listed on the project, put a star by the letter of the rectangle.

Rectangle	Width and Length	Student's Perimeter	Required Perimeter
A	<u>2</u> cm by <u>5</u> cm	$4\text{ cm} + 10\text{ cm} = 14\text{ cm}$	14 cm
B	<u>2</u> cm by <u>5</u> cm	$4\text{ cm} + 10\text{ cm} = 14\text{ cm}$	14 cm
C	<u>2</u> cm by <u>7</u> cm	$4\text{ cm} + 14\text{ cm} = 18\text{ cm}$	18 cm
D	<u>2</u> cm by <u>7</u> cm	$4\text{ cm} + 14\text{ cm} = 18\text{ cm}$	18 cm
E	<u>6</u> cm by <u>8</u> cm	$12\text{ cm} + 16\text{ cm} = 28\text{ cm}$	28 cm
F	<u>4</u> cm by <u>4</u> cm	$8\text{ cm} + 8\text{ cm} = 16\text{ cm}$	16 cm
G	<u>2</u> cm by <u>2</u> cm	$4\text{ cm} + 4\text{ cm} = 8\text{ cm}$	8 cm
H	_____ cm by _____ cm		
I	_____ cm by _____ cm		

2. Is the perimeter of the robot's body double that of the arm? Show calculations below.

$$P \text{ of the body} = 28 \text{ cm}$$

$$P \text{ of 1 arm doubled} = 14 \text{ cm} + 14 \text{ cm} = 28 \text{ cm}$$

Yes, the perimeter of the robot's body is double that of the arm.

3. Is the perimeter of the robot's neck half the perimeter of the head? Show calculations below.

$$P \text{ of robot's neck} = 8 \text{ cm}$$

$$\text{Half the perimeter of robot's head} = 16 \div 2 = 8 \text{ cm}$$

Both calculations are correct!

Part B: I reviewed Carl's robot environment.

Use the chart below to evaluate your friend's robot environment. Measure the lengths and widths of each rectangle. Then calculate the perimeter. Use your string to measure the perimeters of non-rectangular items. Record that information in the table below. If your measurements differ from those listed on the project, put a star by the letter of the shape.

Item	Width and Length	Student's Perimeter	Required Perimeter
J		$24\frac{3}{4} \approx 25 \text{ cm}$	About 25 cm
K	<u>26</u> cm by <u>15</u> cm	$52 \text{ cm} + 30 \text{ cm} = 82 \text{ cm}$	82 cm
L		30 cm	About 30 cm
M	<u>11</u> cm by <u>4</u> cm	$22 \text{ cm} + 8 \text{ cm} = 30 \text{ cm}$	30 cm
N		$19\frac{1}{2} \approx 20 \text{ cm}$	About 20 cm
O	<u>7</u> cm by <u>3</u> cm	$14 \text{ cm} + 6 \text{ cm} = 20 \text{ cm}$	20 cm
P			
Q			