A rectangular garden has a perimeter of 180 feet. The north side of the garden is 40 feet. What is the length of the east side of the garden?

Show your work.

answer: ____________________
Perimeter Challenge

Rectangle X has a length of 17 meters and a width of 9 meters.

Rectangle Y has a length of 17 meters and a width of 12 meters.

You place both rectangles side-by-side to create a new rectangle, Rectangle Z.

What is the perimeter of Rectangle Z?

answer: ____________________
Sam is going to put wooden baseboard around a rectangular bedroom.

The length of the bedroom is 26 feet. The width is one half of the length.

How many feet of baseboard does Sam need?

Show your work.
Mr. Diaz wants to put a fence around his rectangular-shaped yard.

The width of the yard is 65 feet. The length is 122 feet.

How many feet of fencing does Mr. Diaz need?

Show your work.

answer: ____________________
Miss Rose lives in a rectangular house. She needs to replace the gutter along the roof.

The north side of the house measures 60 feet. The east side of the house measures 82 feet.

How many feet of gutter will she need for her house?
Francis is making a picture frame out of craft sticks.

To make the frame, he attaches 4 craft sticks, end to end, to make the right side. He uses another 4 craft sticks to make the right side.

Then he attaches 2 craft sticks, end-to-end, to make the top of the frame. He does the same for the bottom.

If each craft stick measures 4 inches, what is the perimeter of his picture frame?

Show your work.

Perimeter Challenge

answer: ____________________
Jess wants to place a stone border around her square garden. The perimeter of the garden is 80 feet. What is the length of each side?

Show your work.

answer: ____________________
The perimeter of an octagon is 168 centimeters. Each side of the octagon is the same length. What is the length of one side of the octagon?

Show your work.
Haru has a rectangular wooden raft. He wants to put a rubber strip around the edge of the raft to make it more safe.

The length of the raft is 8 feet. The width is twice the length.

How many feet of rubber strip does Haru need?

Show your work.

answer: ____________________
Denise works in a sign shop. She is making a hexagon-shaped sign for a store. Each side of the hexagon is the same length.

One side measures 18 inches.

Denise will attach a neon light tube along the edges of her sign.

How many inches of neon light tube will she need?

answer: ____________________
### Perimeter Challenge

<table>
<thead>
<tr>
<th></th>
<th>Problem Statement</th>
<th>Diagram</th>
<th>Equation</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A rectangular garden has a perimeter of 180 feet. The north side of the garden is 40 feet. What is the length of the east side of the garden?</td>
<td><img src="image1.png" alt="Diagram" /></td>
<td>180 - 80 = 100</td>
<td>100 ÷ 2 = 50 feet</td>
</tr>
<tr>
<td>2</td>
<td>Rectangle X has a length of 17 meters and a width of 9 meters. Rectangle Y has a length of 17 meters and a width of 12 meters. You place both rectangles side-by-side to create a new rectangle, Rectangle Z. What is the perimeter of Rectangle Z?</td>
<td><img src="image2.png" alt="Diagram" /></td>
<td>21 + 21 + 17 + 17 = 76</td>
<td>21 + 21 + 17 + 17 = 76 meters</td>
</tr>
<tr>
<td>3</td>
<td>Sam is going to put wooden baseboard around a rectangular bedroom. The length of the bedroom is 26 feet. The width is one half of the length. How many feet of baseboard does Sam need?</td>
<td><img src="image3.png" alt="Diagram" /></td>
<td>26 + 26 + 13 + 13 = 78</td>
<td>26 + 26 + 13 + 13 = 78 feet</td>
</tr>
<tr>
<td>4</td>
<td>Mr. Diaz wants to put a fence around his rectangular-shaped yard. The width of the yard is 65 feet. The length is 122 feet. How many feet of fencing does Mr. Diaz need?</td>
<td><img src="image4.png" alt="Diagram" /></td>
<td>122 + 122 + 65 + 65 = 374</td>
<td>122 + 122 + 65 + 65 = 374 feet</td>
</tr>
<tr>
<td>5</td>
<td>Jess wants to place a stone border around her square garden. The perimeter of the garden is 80 feet. What is the length of each side?</td>
<td><img src="image5.png" alt="Diagram" /></td>
<td>80 ÷ 4 = 20</td>
<td>80 ÷ 4 = 20 feet</td>
</tr>
<tr>
<td>6</td>
<td>The perimeter of an octagon is 168 centimeters. Each side of the octagon is the same length. What is the length of one side of the octagon?</td>
<td><img src="image6.png" alt="Diagram" /></td>
<td>168 ÷ 8 = 21</td>
<td>168 ÷ 8 = 21 centimeters</td>
</tr>
<tr>
<td>7</td>
<td>Haru has a rectangular wooden raft. He wants to put a rubber strip around the edge of the raft to make it more safe. The length of the raft is 8 feet. The width is twice the length. How many feet of rubber strip does Haru need?</td>
<td><img src="image7.png" alt="Diagram" /></td>
<td>8 + 8 + 16 + 16 = 48</td>
<td>8 + 8 + 16 + 16 = 48 feet</td>
</tr>
<tr>
<td>8</td>
<td>Denise works in a sign shop. She is making a hexagon-shaped sign for a store. Each side of the hexagon is the same length. One side measures 18 inches. Denise will attach a neon light tube along the edges of her sign. How many inches of neon light tube will she need?</td>
<td><img src="image8.png" alt="Diagram" /></td>
<td>18 + 18 + 18 + 18 + 18 + 18 = 108</td>
<td>18 + 18 + 18 + 18 + 18 + 18 = 108 inches</td>
</tr>
</tbody>
</table>

---

**Preview**

Please log in to download the printable version of this worksheet.