Algebra: Area of a Parallelogram

Find the area of each figure.

1. \( \text{14 in.} \times 18 \text{ in.} \)

2. \( 6\frac{2}{3} \text{ ft} \times 6 \text{ ft} \)

3. \( 42 \text{ m} \times 30.2 \text{ m} \)

Use figures A, B, and C for Exercises 4–6.

4. Find the perimeter of each figure.

5. Find the area of each figure.

6. Suppose that each figure has twice the length and twice the width as the original figure. Find the perimeter of each. Then find the area of each.

Complete the chart so that it shows the length, width, and perimeter for different rectangles with an area of 24 square meters.

<table>
<thead>
<tr>
<th>Area of Rectangle</th>
<th>Length</th>
<th>Width</th>
<th>Perimeter</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. 24 m²</td>
<td>2 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. 24 m²</td>
<td>3 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. 24 m²</td>
<td>4 m</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Test Prep

10. Find the area of a parallelogram which has a base of 14.5 centimeters and a height of 7.2 centimeters.

   - A 76.2 cm
   - B 88.4 cm
   - C 98.6 cm
   - D 104.4 cm

11. A parallelogram with a perimeter of 20 yards has a height of 3 yards. Tammy does not know how many yards the base is, but she does know that the side adjoining the base is 4 yards. What is the area of the parallelogram?