

**Quiz 113** .....

1. The sum of two positive integers is 9. The sum of their squares is 53. Find the integers.
  
  
  
  
  
  
  
  
  
  
2. The difference between two positive integers is 4. The sum of the larger and the square of the smaller is 24. Find the integers.
  
  
  
  
  
  
  
  
  
  
3. An isosceles right triangle has a hypotenuse of 2 feet. Find the perimeter of the triangle. Leave your answer in simplest radical form.
  
  
  
  
  
  
  
  
  
  
4. A rectangle has a width of 8 cm and a height of 7 cm. A strip of uniform width is cut around the rectangle to decrease its area by  $36 \text{ cm}^2$ . What is the width of the strip?
  
  
  
  
  
  
  
  
  
  
5. Two cars left an intersection at the same time. Car A traveled north and car B traveled east. When car A was 14 miles farther than car B from the intersection, the distance between the two cars was 16 miles more than car B had traveled. How far apart were they?