## Math 8

Pythagorean Theorem
Mixture of problems

1. What is the length of the hypotenuse of the triangle?

2. A pathway in the Charlotte state park is show below. What is the total distance around the path?

3. Find the length of the missing side of this right triangle.

4. What is the area of the triangle below?

5. A water tower has a height of $\mathbf{2 0}$ feet. There is a rope tied to the top of the tower and anchored to the ground, 13 feet away from the base of the water tower. How long is the rope?
6. What is the area of the triangle shown below?

7. What is the perimeter of a triangle with legs of length 4 in and 3 in?
8. Roy left Charlotte and traveled 12 miles east. He then turned south and traveled 5 miles. If Roy traveled directly home, how far away was he?
9. What is the length of segment PR?

10. What is the distance between the two points?

