

5.4-5.5 EVALUATE Special Right Triangles
Pre-AP Geometry

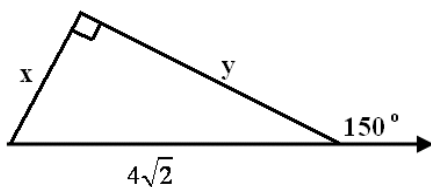
Name _____
 Period _____ Date _____

1. Soren is flying a kite on the beach. The string forms a 45° angle with the ground. If he has let out 16 meters of line, how high above the ground is the kite?

2. Prospect Park is a square with side lengths of 512 meters. One of the paths through the park runs diagonally from the northeast corner to the southwest corner, and it divides the park into two $45^\circ - 45^\circ - 90^\circ$ triangles. How long is that path?

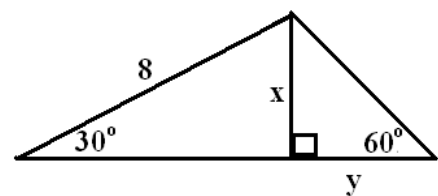
3. A tent has a mesh door that is shaped like a $45^\circ - 45^\circ - 90^\circ$ triangle. The longest side of the door is 36 inches. What is the area of the mesh door?

4. Solve for x and y .



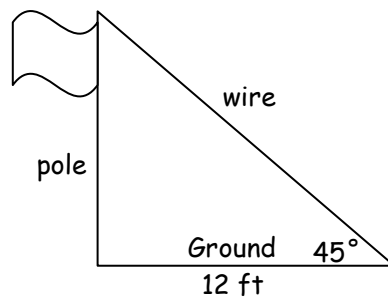
$x =$ _____ $y =$ _____

5. Solve for x and y .



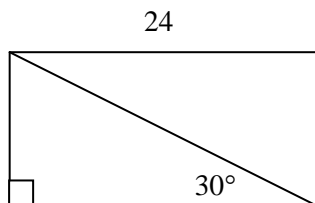
$x =$ _____ $y =$ _____

6. Find the length of the wire and the height of the pole.

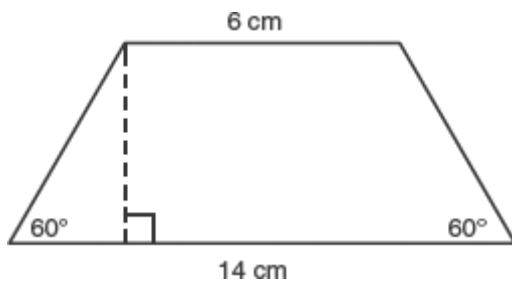


7. Find the perimeter of regular triangle with an altitude length $7\sqrt{3}$.

8. Given the rectangle, find the height and the area.



9. Calculate the perimeter of the trapezoid.



10. Calculate the area of the triangle.

