

Sketch the figure as described. Find the requested length

1. Each base on a standard baseball diamond lies 90 feet from the next. Find the distance the catcher must throw a baseball from 3 feet behind home plate to 2nd base.
2. The perimeter of a square is 20 centimeters. Find the length of a diagonal
3. The altitude of an equilateral triangle is 18 in. Find the length of a side
4. The hypotenuse of an isosceles right triangle is 16 cm. Find the length of a side

5. The length of the diagonal of a square is $\frac{5\sqrt{2}}{2}$. Find the length of a side
6. The perimeter of a rectangle is 24 inches. The length of a side is 4 inches. Find the length of the diagonal.
7. A point on the edge of a symmetrical canyon is 4500 feet above a river that cuts through the canyon floor. The angle of depression (shown on the diagram) from each side of the canyon to the canyon floor is 60°
- a) Find the distance across the canyon
- b) Find the length of the canyon wall (from the edge to the river)