5. The perimeter of a square is 44. Find the length of a diagonal.

6. Find the length of the diagonal of the rectangle.

7. Find the altitude of an equilateral triangle if a side is 6 mm long.
8. 
Given: \( \overline{AC} \perp \overline{BC}, \overline{CD} \perp \overline{AB}, \)  
\[ \text{m}\angle B = 30^\circ, \ BC = 8\sqrt{3} \]  
Find: \( CD \)

9. 
Given: \( \text{TRWX is a kite (} \overline{TR} = \overline{WR} \text{ and } \overline{TX} = \overline{XW} \)  
\[ \text{RY} = 5, \ TW = 10, \ YX = 12 \]  
Find: 
  a. \( TR \)
  b. \( WX \)

12. 
  a. Find the coordinates of \( B \)

  b. Find the slope of \( \overrightarrow{OB} \)

  c. Find \( \frac{\text{AB}}{\text{OA}} \) (In trigonometry, this ratio is called the tangent of \( \angle BOA \))
15. Find the perimeter of the isosceles trapezoid EFGH (Hint: drop altitudes of the trapezoid from E and H).

\[ \text{Find the perimeter of the isosceles trapezoid EFGH.} \]

[Diagram of EFGH with dimensions labeled: E=10, F=60°, H=10, G=16]

16. Given: \( PK \) is an altitude of isosceles trapezoid JMOP.
   \( PK = 6, \ PO = 8, \ m \angle J = 45° \)

Find: The perimeter of JMOP

\[ \text{Find the perimeter of JMOP.} \]

[Diagram of JMOP with dimensions labeled: P=8, O=8, M=6, J=16, K=6, \( m \angle J = 45° \)]

17. Using the figure, find

   a. VS
   b. ST
   c. VT
   d. The ratio of the perimeter of \( \triangle VSR \) to the perimeter of \( \triangle VRT \)

[Diagram of TSVR with dimensions labeled: T=60°, S=30°, V=6, S=6]
18. One of the angles of a rhombus has a measure of 120°. If the perimeter of the rhombus is 24, find the length of each diagonal.

22. Find the length of the altitude to the base of the isosceles triangle shown.

24. Find x and y.