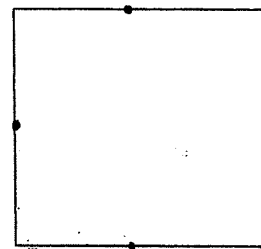


Chapter review of Special Right Δ s

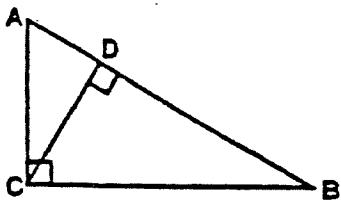
* Review properties of quadrilaterals: \square , Rhombus, etc.

- The diagonals of a rhombus are 30 and 16. Find the perimeter.
- Each side of an equilateral triangle is 12. Find the altitude to one side.
- The square shown has side length of 10 cm. Find the perimeter of the figure formed by joining the consecutive midpoints of the square.



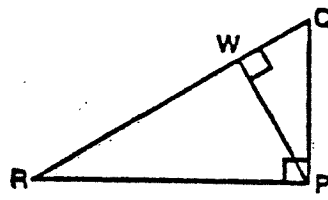
- Given: $AD = 4$
 $BD = 8$

Find CD .



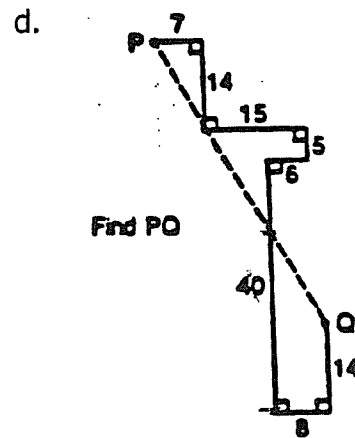
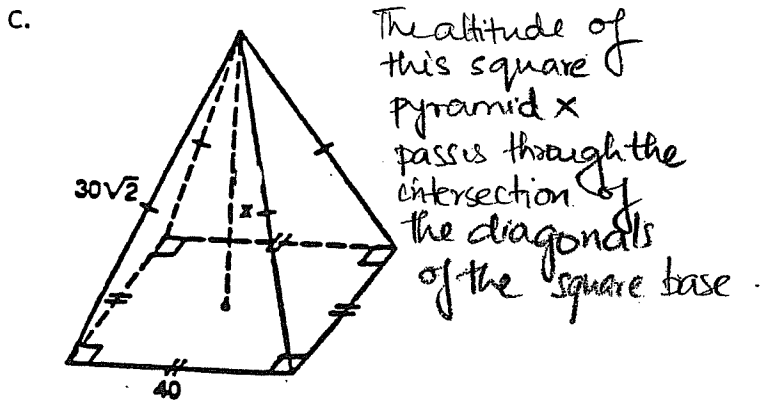
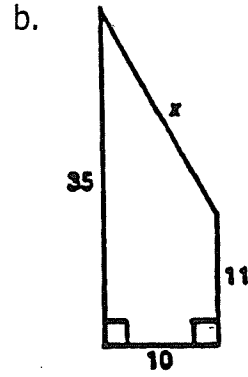
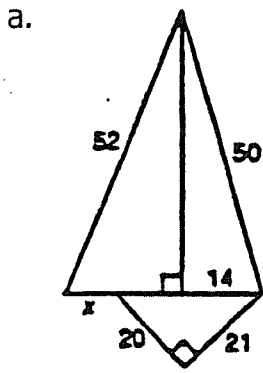
- Given: $WQ = 4$
 $WR = 8$

Find QP .



- Find the length of the longest diagonal in a rectangular box that is $8 \times 9 \times 12$.

6. Solve for x.

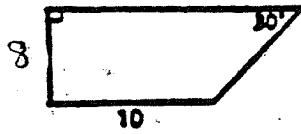


7. What is the ratio of the sides of the following triangles:

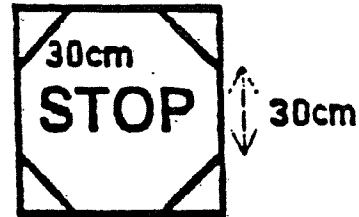
a. 45 - 45 - 90

b. 30 - 60 - 90

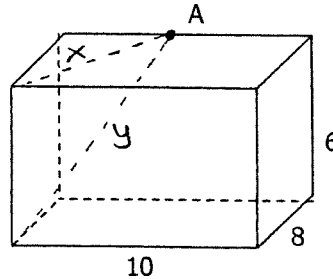
8. Find the perimeter of the trapezoid.



9. Find the dimensions of the square sheet of metal from which this regular octagonal stop sign was cut.



10. If point A is the midpoint of one edge, find lengths x and y.



11. Would a triangle with the following lengths for its sides be right, obtuse, acute or impossible?

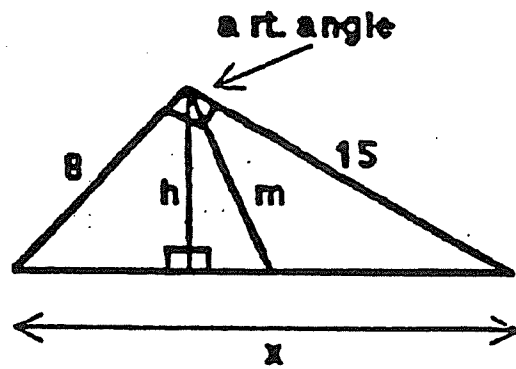
a. 6, 9, 3

b. $\sqrt{8}, \sqrt{3}, \sqrt{3}$

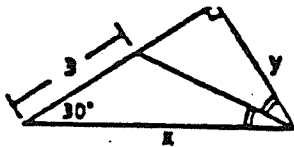
c. $\sqrt{5}, \sqrt{7}, \sqrt{3}$

d. $17x + 1, 15x, 8x + 1$

12. Find the length of the altitude to the hypotenuse.



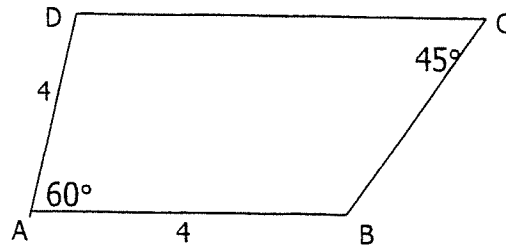
13. Find x and y .



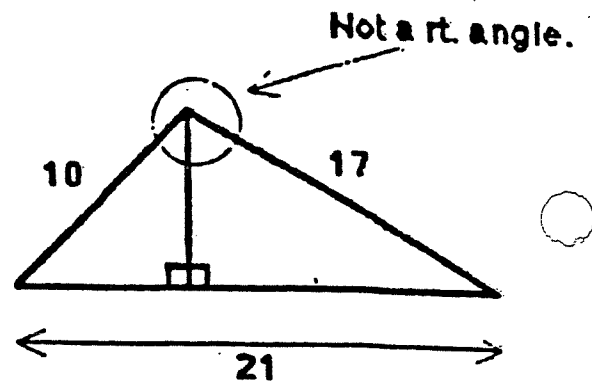
14. Find the legs of an isosceles trapezoid whose bases are 15 and 25 and whose height is 12.

15. The diagonals of a rhombus have a length ratio of 2:1. If the perimeter is 20, find the sum of the lengths of the diagonals.

16. $ABCE$ is a trapezoid, $\overline{DC} \parallel \overline{AB}$. Find DC and BC .



17. Find the length of the altitude.



18. Find the length of the diagonals of a rhombus that has a perimeter of 40 cm and one interior angle of 60° .

