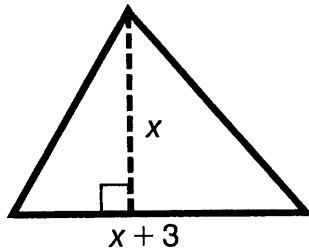




Once upon a time a mother skunk had two baby skunks, named In and Out. When Out was in, In was out. One day, In went out and Out came in, and the mother skunk sent Out out to bring In in. How did Out find In?

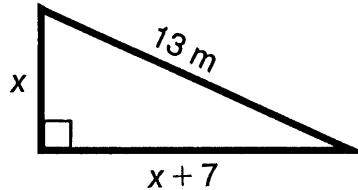
Solve each problem below. If an irrational root occurs, round to the nearest tenth. Find your answer at the bottom of the page and cross out the letter above it. When you finish, the answer to the title question will remain.

- ① The base of a triangle is 3 cm longer than its altitude. The area of the triangle is 35 cm^2 . Find the altitude. (Hint: The area of a triangle equals $\frac{1}{2} \cdot \text{base} \cdot \text{altitude}$.)



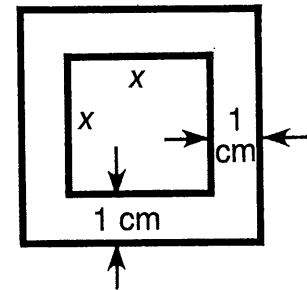
- ② The altitude of a triangle is 2 cm shorter than its base. The area is 15 cm^2 . Find the base of the triangle.

- ③ A flower garden is in the shape of a right triangle. The longest side of the triangle measures 13 m. One of the shorter sides is 7 m longer than the other. Find the length of the shortest side. (Hint: Use the Pythagorean Theorem: $a^2 + b^2 = c^2$.)



- ④ The diagonal measure of a movie screen is 6 m. The length of the screen is 2 m greater than the height. Find the dimensions of the screen.

- ⑤ A square picture is mounted in a frame 1 cm wide. The area of the picture is $\frac{2}{3}$ of the total area. Find the length of a side of the picture.



- ⑥ A rectangular pond measures 3 m by 5 m. A concrete walk of uniform width is constructed around the pond. If the walk and pond together cover an area of 39 m^2 , how wide is the walk?

- ⑦ A rectangular counter is covered with 600 square tiles. The counter could have been covered with 400 tiles 1 cm longer on a side. Find the length of a side of the smaller tile.

O	I	T	N	S	A	T	H	I	N	O	W	C	U	T
1.2 m	4.8 cm	6.6 cm	8.2 cm	1.8 m	4.4 cm	4 m	3.1 m by 5.1 m	8 cm	7.7 cm	8.9 cm	7 cm	3.7 m by 5.7 m	5 m	5.6 cm