

What Kind of Music Do Barbers and Tailors Play Together?



Solve each problem and find your answer at the bottom of the page. Cross out the letter above each correct answer. When you finish, you will have the answer to the noteworthy question above.



- ① Eight more than the square of a number is the same as 6 times the number. Find the number.
- ② Fifteen less than the square of a number is the same as twice the number. Find the number.
- ③ If a number is added to twice its square, the result is 6. Find the number.
- ④ Seven less than 4 times the square of a number is 18. Find the number.
- ⑤ Find two consecutive integers whose product is 56.

- ⑥ Find two consecutive positive odd integers whose product is 35.
- ⑦ The sum of the squares of two consecutive integers is 41. Find the integers.
- ⑧ Find two consecutive odd integers such that the square of the first, added to 3 times the second, is 24.
- ⑨ Find two consecutive even integers such that the square of the second, decreased by twice the first, is 52.
- ⑩ Find three consecutive positive integers such that the square of the first, increased by the last, is 22.

S	C	U	H	A	L	T	I	O	P	S	O	I	E	N	W	G
3, 5	4, 6 or -2, -4	5 or -3	4, 5, 6	5, 7	6, 7 or -7, -6	$\frac{2}{3}$ or -2	$\frac{3}{4}$ or -5	$\frac{2}{5}$ or $-\frac{2}{5}$	5, 6 or -6, -5	6 or -1	2 or 4	6, 8 or -8, -6	-9, -7	4, 5 or -5, -4	6, 7, 8	7, 8 or -8, -7

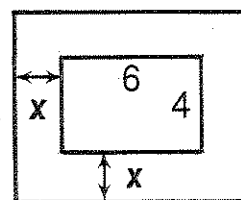
Did You Hear About...

A	B	C	D
E	F	G	H ?

Solve each problem below. Find your answer in the answer column and notice the word next to it. Write this word in the box containing the letter of that exercise. Keep working and you will hear about something hot.

- (A) The length of a rectangle is 3 cm more than the width. The area is 70 cm^2 . Find the dimensions of the rectangle.
- (B) The length of a rectangle is 4 cm more than the width. The area is 96 cm^2 . Find the dimensions of the rectangle.
- (C) The length of a photograph is 1 cm less than twice the width. The area is 45 cm^2 . Find the dimensions of the photograph.
- (D) If the sides of a square are increased by 3 m, the area becomes 64 m^2 . Find the length of a side of the original square.
- (E) A square field had 5 m added to its length and 2 m added to its width. The field then had an area of 130 m^2 . Find the length of a side of the original field.
- (F) The dimensions of a rectangular garden were 4 m by 5 m. Each dimension was increased by the same amount. The garden then had an area of 56 m^2 . Find the dimensions of the new garden. (Hint: Let x be the amount of increase.)
- (G) The dimensions of a rectangular garden were 3 m by 10 m. When both dimensions were increased by equal amounts, the area of the garden doubled. Find the dimensions of the new garden.

- (H) A 4 m by 6 m rug covers half of the floor area of a room and leaves a uniform strip of bare floor around the edges. What are the dimensions of the room?



6 m	THAT
5 m by 12 m	HOT
7 cm by 10 cm	THE
8 cm by 11 cm	CHAIRS
8 m	WHO
4 cm by 7 cm	GUY
5 m	DEALER
7 m by 9 m	PILLOWS
8 cm by 12 cm	CROOKED
7 m by 8 m	BUYS
5 m by 6 m	STUFF
6 m by 8 m	WATERBEDS
8 m by 9 m	SELLS
7 m by 14 m	TABLES
5 cm by 9 cm	FURNITURE

Did You Hear About...

A	B	C	D
E	F	G	H ?

Solve each problem below. If an irrational root occurs, round to the nearest tenth. Find your answer in the answer column and notice the word next to it. Write this word in the box containing the letter of the exercise. Keep working and you will hear about a joint joint.

- (A) The length of a rectangle is 4 m more than the width. The area of the rectangle is 45 m^2 . Find the length and width.
- (B) The length of a rectangle is three times the width. The area is 108 cm^2 . Find the dimensions of the rectangle.
- (C) The length of a photograph is 1 cm less than twice the width. The area is 28 cm^2 . Find the dimensions of the photograph.
- (D) A square field had 3 m added to its length and 2 m added to its width. The field then had an area of 90 m^2 . Find the length of a side of the original field.
- (E) The length of a rectangular mural is 2 m greater than the width. The area is 20 m^2 . Find the dimensions of the mural.
- (F) The length of a rectangle is 6 cm more than the width. The area is 11 cm^2 . Find the length and width.
- (G) The length of a rectangular garden is 4 m greater than the width. The area is 71 m^2 . Find the dimensions of the garden.
- (H) The length of a rectangular park is 2 km less than twice the width. The area is 9 km^2 . Find the dimensions of the park.

2 cm by 14 cm JOINT

4 cm by 7 cm WHO

2.1 km by 4.3 km BONES

3.6 m by 5.6 m NOTHING

1.8 cm by 7.8 cm MORE

8 m WAS

5 m by 9 m THE

2.7 km by 3.4 km TALK

7 m GOT

5.2 m by 9.2 m SORE

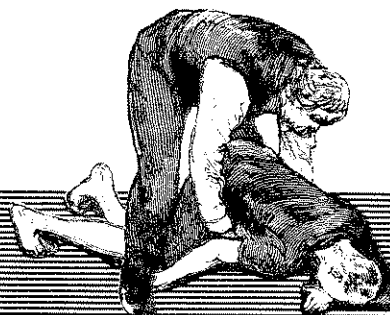
1.5 cm by 7.5 cm BUT

6 cm by 18 cm CHIROPRACTOR

3.3 cm by 5.3 cm EVERYBODY

6.7 cm by 10.7 cm BACK

5 cm by 15 cm BROKEN

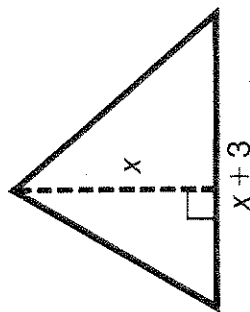




nce upon a time a mother skunk had two baby skunks, named In and Out. When Out was in, In was out. One day, In went out and Out came in, and the mother skunk sent Out out to bring In in. How did Out find In?

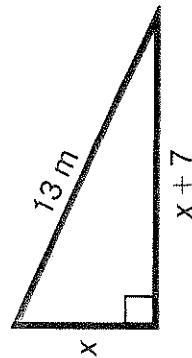
Solve each problem below. If an irrational root occurs, round to the nearest tenth. Find your answer at the bottom of the page and cross out the letter above it. When you finish, the answer to the title question will remain.

- 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 $\frac{1}{2} \cdot \text{base} \cdot \text{altitude}$.)

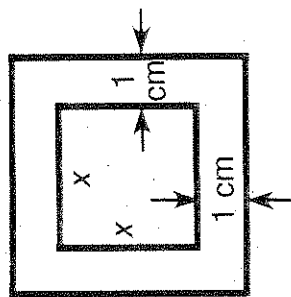


- ② The altitude of a triangle is 2 cm shorter than its base. The area is 15 cm^2 . Find the base of the triangle.

- 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