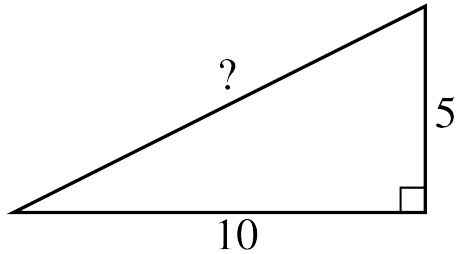


# Practice Problems

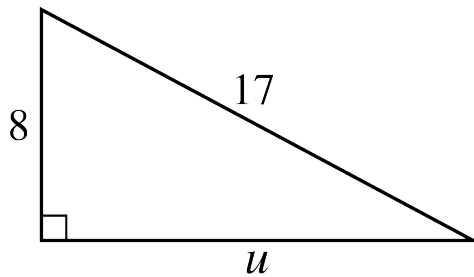
## Pythagorean Theorem

Difficulty level key:   \*  $\leftrightarrow$  basic,   \*\*  $\leftrightarrow$  advanced,   \*\*\*  $\leftrightarrow$  challenge

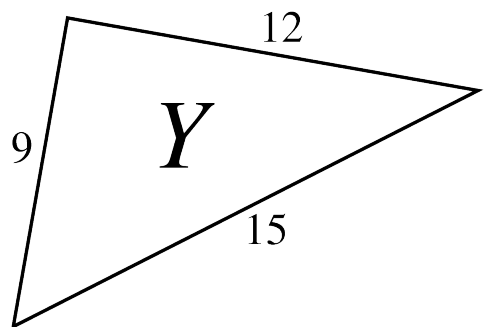
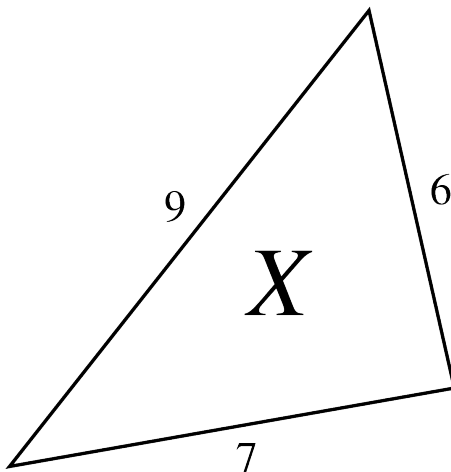
1. (\*) Solve for the unknown side.



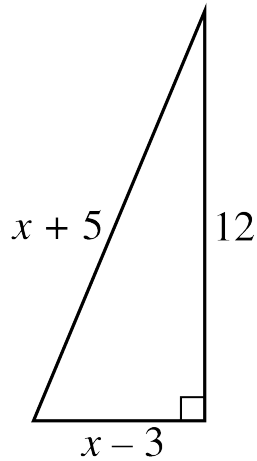
2. (\*) Solve for the value of  $u$ .



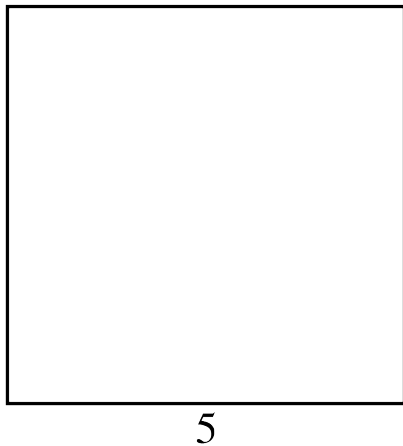
3. (\*) Which of the below are right triangles?



4. (\*\*) Solve for  $x$ .



5. (\*\*) How long is the square's diagonal?



6. (\*\*\*) Tom is painting a building. He has a ladder that's 4m long. To do the painting, the top of the ladder must be at least 3.5m up the wall. What is the farthest that the bottom of the ladder can be from the wall?

Answers: 1.  $5\sqrt{5}$ , 2. 15, 3. X is not, Y is, 4. 8, 5.  $5\sqrt{2}$ , 6. 1.94m