Class Expectations



Be on time.

Get your books open right away and copy down the learning goals.

Copy down all notes and examples.

No phones while I'm teaching.

Time Left for Knowledgehook at end?

Student Information Sheet for Mr. Lowe NAME: HOME Phone Number: Contact Name(s): _ (Contact) Work Number: (t Parent/Guardian First and Last Names) (Contact) Cell Number: (Who's work/cell? Mom or Dad) E-mail address (parents/guardian): [I use this to send mark summaries/updates.] **School Counsellor:** (A-F=Ms.Fairhall, G-L=Mrs.Stirling, M-Re=Mrs.Kennedy, Ri-Z=Mrs.Shepherd) (Circle name) 1. Please fill in your Semester 2 Timetable. (I MUST see your MSIP period, MSIP teacher and ROOM NUMBERS below) D (Day 1) L COURSE U Code) Ν C TEACHER Η Room # 2. What were the most recent math courses you took? What was your mark? Who was your teacher? Course Mark Teacher (ex. Gr.9 Academic or Gr.10 Applied) (and school if not HHSS)



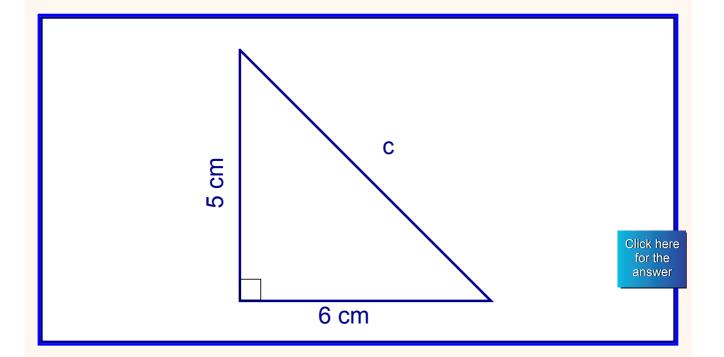
Length of a side





Below is a right-angled triangle. What is the length of side c?

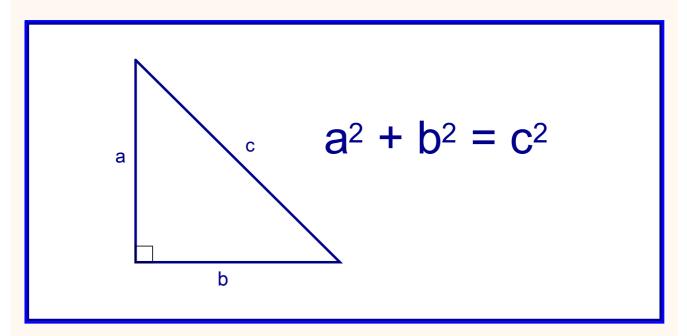
Note: A **precise** measurement, to several decimal places, is needed.







If you were able to answer the question on the previous page, you used the Pythagorean theorem. If you were not able to answer the question, use the next few pages to learn about the Pythagorean theorem.



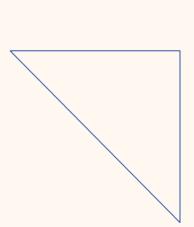


Who is Pythagoras?



Pythagoras was a Greek philosopher and mathematician. His theory is used to calculate the length of the sides in a

right-angled triangle.



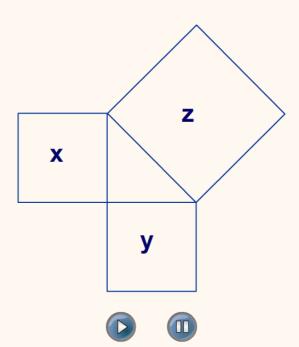








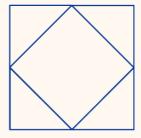
If you draw squares out of the sides of a right angled triangle you end up with something like this:





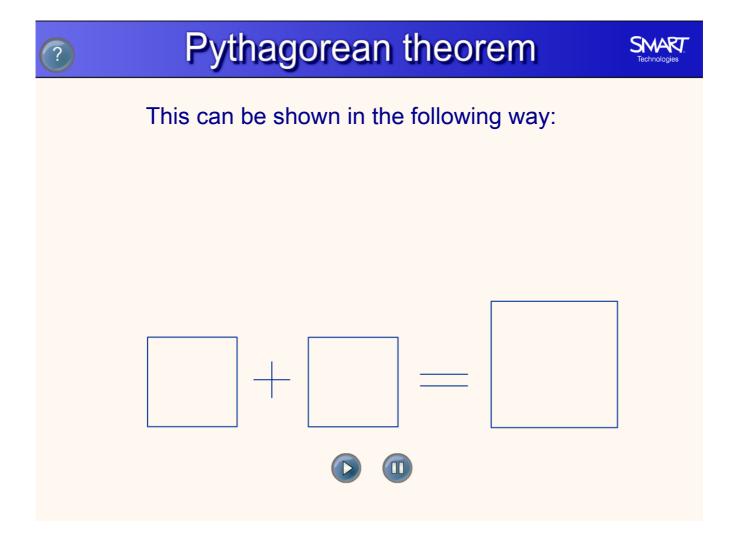


Pythagoras realized that the area of squares x and y were equal to the area of square z.













To find the area of a square, you multiply its width by its length. You could also say it is the width or length squared.

$$\begin{array}{c|c} & c \\ \hline a & b \\ \hline \end{array} + b \end{array} = \begin{array}{c|c} c \\ \hline \end{array}$$









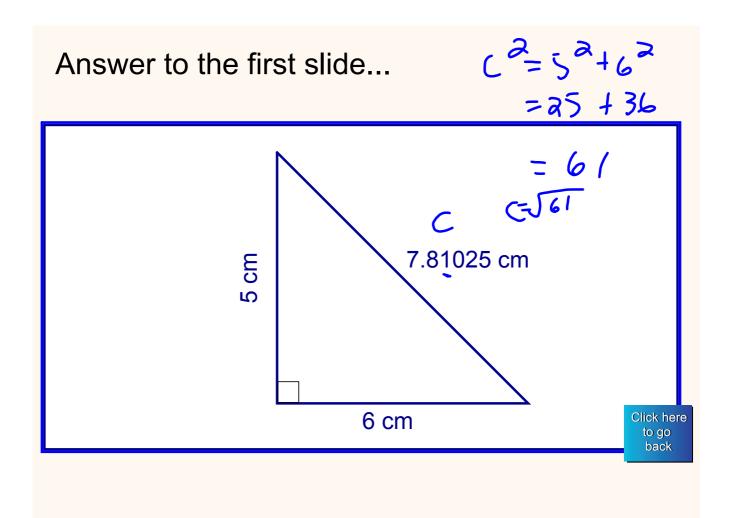
Since the width of the squares is the same length as the sides of the original triangle, it is possible to calculate the length of any side as long as you know the other two. This is the Pythagorean theorem.

$$a^2 + b^2 = c^2$$









Solving Proportions

Discuss Rounding Errors!!

Solve.

Solve.

a)
$$\frac{3}{4} \times \frac{3}{10}$$

b) $\frac{5}{4} \times \frac{11}{c}$

c) $\frac{x}{5} \times \frac{9}{8}$
 $\frac{x}{5} \times \frac{9}{8}$

Time Left for Knowledgehook?

Let's Try Knowledge Hook!

Take out your cell phone; seriously.



Block B