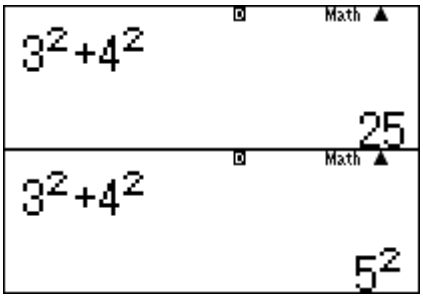
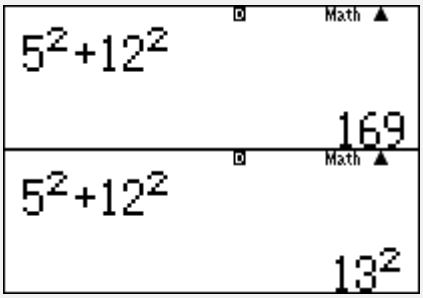
Module 2 : The concept of congruence

Part B – Introduction to the Pythagorean Theorem

The Pythagorean theorem is one of the oldest known formulas in mathematics. It is the right triangle relationship defined by $a^2 + b^2 = c^2$ where a and b are the legs of the right triangle and ci s the hypotenuse (longest side). 3 x^2 + 4 x^2 = SHIFT ◦,,, (FACT)	
To prove a triangle is a right triangle use the Pythagorean Theorem and confirm the relationship $a^2 + b^2 = c^2$. 5 x^2 + 1 2 x^2 = SHIFT ◦,,,	
In this example the product is not a perfect square so the triangle is not a right triangle. 7 x^2 + 2 3 x^2 = SHIFT ◦,,,