**PYTHAGOREAN THEOREM**

**a2 + b2 = c2**

**ON RIGHT TRIANGLES**

**LEGS - 5 AND 12**

**FOUND AT THE RIGHT ANGLE**

**THE 2 SHORTEST SIDES**

**HYPOTENUSE - THE LONGEST SIDE ON THE RIGHT TRIANGLE**

**FORMULA a2 + b2 = c2**

**IS IT A RIGHT TRIANGLE? Show Proof**

1. 7 IN, 8 IN, 12 IN

2. 8 CM, 10 CM, 13 CM

3. 6 IN, 8 IN, 10 IN

4. 3 IN, 4 IN, 5 IN

5. 6 CM, 9 CM, 11 CM

6. 9 M, 10 M, 3 M

7. 2 CM, 4 CM, 5 CM

**Find the missing side**

EX 1: LEGS: 9 FT AND 6 FT

EX 2: LEGS: 3 KM AND 5 KM

EX 3: LEGS: 8 CM AND 15 CM

EX 4: LEGS: 5 CM AND 5 CM

EX 5: LEG IS 10 INCHES AND HYPOTENUSE IS an13 INCHES. HOW LONG IS THE OTHER LEG?

EX 6: LEG IS 6 FEET AND HYPOTENUSE IS 9 FEET. WHAT IS THE LENGTH OF THE OTHER LEG?

EX 7: LEG IS 12 INCHES AND HYPOTENUSE IS 20 INCHES. WHAT IS THE LENGTH OF THE MISSING LEG?

**WORKING IN PAIRS. DRAW THEN FIND THE MISSING SIDE.**

**ON YOUR OWN.**

CREATE AND LABEL 2 RIGHT TRIANGLES WITH CORRECT LENGTH OF ALL SIDES. PROVE THAT YOUR TRIANGLES ARE RIGHT TRIANGLES.