DIFFERENCE OF TWO SQUARES

Answer all of these questions. Remember to show your working out in all questions.

MAIN QUESTIONS

1.

$x^2 - 9$

2.

$16y^2 - 25$

3.

$49 - 4a^2$

4.

$81p^2 - 64q^2$

5.

$121m^4 - 100n^4$

6.

$x^4 - 16y^4$

7.

$9x^2 - (y + 2)^2$

8.

$(2a + b)^2 - (a - 3b)^2$

9.

$x^6 - 64y^6$

10.

$256 - (3x - 4)^4$

MASTER QUESTIONS

M1.

A square garden has an area of $144m^2$. A smaller square patio of area $64m^2$ is removed from one corner. What is the area of the remaining garden?

M2.

The product of two consecutive odd numbers is 143. Find the numbers.

M3.

A rectangular field is 10m longer than it is wide. If the area is $375m^2$, find its dimensions.

M4.

The difference between the squares of two numbers is 72. If their sum is 18, find the numbers.

A right-angled triangle has hypotenuse $(x + 3)$cm and one leg $(x - 3)$cm. If the area is 54cm^2, find the length of the other leg.