MATHS TEST 4° ESO _ 2010.
1st term resit exam. January
Name:……N°:……course:……..

1ª) Draw the intervals and express the intervals in other two ways.

a) $-4<x<7$ b) $[-5,0)$

2ª) Find and simplify using only radical properties: $\dfrac{\sqrt[5]{a^2}\cdot\sqrt{a^5}\cdot\sqrt[6]{a^5}}{\sqrt[7]{a^3}\cdot\sqrt[7]{a^3}}$

3ª) Express with integer denominator: $\dfrac{4-2\sqrt{5}}{2\sqrt{5}-\sqrt{6}}$

4ª) Simplify: $\sqrt{28}+5\sqrt{112}-2\sqrt{63}$

5ª) Find m if we know that the remainder in the following division is -123

$$3x^3-x^2-(m-1)x+5 \quad \div \quad (x+4)$$

6ª) Calculate and simplify: a) $\dfrac{x^2}{x^2+x-12}\cdot\dfrac{x^2-9}{2x^6}$

b) $\dfrac{2}{x(x+2)}+\dfrac{3}{(x+2)(x-3)}$

7ª) Solve:

a) $\dfrac{x-1}{x+1}-\dfrac{3+x}{x}=2$

b) $\sqrt{2x+6}-\sqrt{x+4}=1$

8ª) DeShawn and Shayna are selling flower bulbs for a school fundraiser. Customers can buy bags of windflower bulbs and bags of daffodil bulbs. DeShawn sold 10 bags of windflower bulbs and 12 bags of daffodil bulbs for a total of $380. Shayna sold 6 bags of windflower bulbs and 8 bags of daffodil bulbs for a total of $244. What is the cost each of one bag of windflower bulbs and one bag of daffodil bulbs?

9ª) Suppose you decide to move your garden away from the house. The length of the garden must be twice as long as the width. If the area is now 139 meters square, what dimensions should the garden have?

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Fundraiser= recaudación de fondos
Windflower= anémona
Daffodil=narciso
Fence, fencing=valla, vallado

1	2	3	4	5	6	7	8	9
0.5	0.75	0.75	1	1	1	2	1.5	1.5