GLOBAL 2ª EVALUACIÓN

1.- Calculate HCF and LCM of: (1 punto)

a) 150 and 60 b) 126 and 66

2.- Calculate (remember order of operations): (2 puntos)

a) $[-5+2]x(-1)-(-7)=$

b) $(3-2)^2-(-6)x(+2)=$

c) $(-10):(+2)+(-3)x(+2)-4=$

d) $3x[-3+2]^3+8:2-(+3)x(-3)=$

3.- Calculate: (1,5 puntos)

a) $2^2 \cdot 3^2 =$

b) $(-1)^7 \cdot (-1)^3 =$

c) $(-3)^3 : (-3)^2 =$

4.- Arrange in ascending order: (1 punto)

$-3{,}23;\ 0{,}124;\ -3{,}235;\ 0;\ -3{,}1;\ 0{,}15;\ 0{,}257;\ 0{,}242;\ -3{,}07;\ -3{,}12$

5.- Work out these operations: (1,5 puntos)

a) $3{,}2507x100=$	b) $16{,}1304:100=$
c) $1874{,}32:1000=$	d) $0{,}4783x10000=$

6.- Round to the nearest hundredths: (1,5 puntos)

a) 1,3275 →	b) -23,0521 →
c) -0,3247 →	d) 115,9956 →

7.- Un camión transporta 3 bloques de mármol de 1,3 toneladas cada uno y 2 vigas de hierro de 0,5 toneladas cada una. (1,5 puntos)

Calcula:

a) El total de toneladas que transporta el camión.

b) El total de kilos que transporta el camión, si 1 tonelada es igual a 1.000 kilos.

8.- Fill in the gaps:

a) 5^3 is five .....

b) 10 < 100 ten is ..... than a hundred and a hundred is ..... than 10

c) A power is a^n. The name of ***a*** is ..... and the name of ***n*** is .....

9.- Bob had 6.00 €. He bought an ice cream for 2.55€ and a bag of chips for 0.75 €. How much money did he have left?

SOLUCIONES

1.- Calculate HCF and LCM of:

a) 150 and 60

150	2	60	2
75	3	30	2
25	5	15	3
5	5	5	5
1		1	

$150 = 2 \cdot 3 \cdot 5^2$

$60 = 2^2 \cdot 3 \cdot 5$

$HCF = 2 \cdot 3 \cdot 5 = 30$

$LCM = 2^2 \cdot 3 \cdot 5^2 = 300$

b) 126 and 66

126	2	66	2
63	3	33	3
21	3	11	11
7	7	1	
1			

$126 = 2 \cdot 3^2 \cdot 7$

$66 = 2 \cdot 3 \cdot 11$

$HCF = 2 \cdot 3 = 6$

$LCM = 2 \cdot 3^2 \cdot 7 \cdot 11 = 1386$

2.- a) $[-5+2]x(-1)-(-7) = (-3)x(-1)+7 = 3+7 = 10$

b) $(3-2)^2-(-6)x(+2) = 1^2-(-12) = 1+12 = 13$

c) $(-10):(+2)+(-3)x(+2)-4 = -5+(-6)-4 = -5-6-4 = -15$

d) $3x[-3+2]^3+8:2-(+3)x(-3) = 3x(-1)^3+4-(-9) = -3+4+9 = 10$

3.- a) $2^2 \cdot 3^2 = 6^2 = 36$

b) $(-1)^7 \cdot (-1)^3 = (-1)^{10} = 1$

c) $(-3)^3 : (-3)^2 = (-3)^1 = -3$

4.- Arrange in ascending order:

$-3{,}23;\ 0{,}124;\ -3{,}235;\ 0;\ -3{,}1;\ 0{,}15;\ 0{,}257;\ 0{,}242;\ -3{,}07;\ -3{,}12$

$-3{,}235 < -3{,}23 < -3{,}12 < -3{,}1 < -3{,}07 < 0 < 0{,}124 < 0{,}15 < 0{,}242 < 0{,}257$

5.- Work out these operations:

a) $3{,}2507x100 = 325{,}07$	b) $16{,}1304 : 100 = 0{,}161304$
c) $1874{,}32 : 1000 = 1{,}87432$	d) $0{,}4783x10000 = 4783$

6.- Round to the nearest hundredths:

a) $1{,}3275 \rightarrow 1{,}33$	b) $-23{,}0521 \rightarrow -23{,}05$
c) $-0{,}3247 \rightarrow -0{,}32$	d) $115{,}9956 \rightarrow 116$

7.- Un camión transporta 3 bloques de mármol de 1,3 toneladas cada uno y 2 vigas de hierro de 0,5 toneladas cada una.
Calcula:
a) El total de toneladas que transporta el camión.
b) El total de kilos que transporta el camión, si 1 tonelada es igual a 1.000 kilos.

a) 3 x 1,5 = 4,5
   2 x 0,5 = 1 4,5 + 1 = 5,5 toneladas transporta el camión

b) 5,5 x 1000 = 5500 kilos transporta el camión

8.- Fill in the gaps:
d) 5^3 is five *cubed (or to the power of three)*
e) 10 < 100 ten is *less* than a hundred and a hundred is *greater* than 10
f) A power is a^n. The name of ***a*** is *base* and the name of ***n*** is *exponent*

9.- Bob had 6.00 €. He bought an ice cream for 2.55€ and a bag of chips for 0.75 €. How much money did he have left?

6.00 – 2.55 = 3.45 3.45 – 0.75 = 2.7
He has 2.7 euros