

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) $[-5 + 2] \times (-1) - (-7) =$

b) $(3 - 2)^2 - (-6) \times (+2) =$

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

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

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) $3,2507 \times 100 =$

b) $16,1304 : 100 =$

c) $1874,32 : 1000 =$

d) $0,4783 \times 10000 =$

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

a) $1,3275 \rightarrow$

b) $-23,0521 \rightarrow$

c) $-0,3247 \rightarrow$

d) $115,9956 \rightarrow$

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 fiveb) $10 < 100$ ten is than a hundred and a hundred is than 10c) 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

$$\begin{array}{r|l} 150 & 2 \\ 75 & 3 \\ 25 & 5 \\ 5 & 5 \\ 1 & \end{array}
 \begin{array}{r|l} 60 & 2 \\ 30 & 2 \\ 15 & 3 \\ 5 & 5 \\ 1 & \end{array}
 \begin{array}{l} 150 = 2 \cdot 3 \cdot 5^2 \\ 60 = 2^2 \cdot 3 \cdot 5 \\ \text{HCF} = 2 \cdot 3 \cdot 5 = 30 \\ \text{LCM} = 2^2 \cdot 3 \cdot 5^2 = 300 \end{array}$$

b) 126 and 66

$$\begin{array}{r|l} 126 & 2 \\ 63 & 3 \\ 21 & 3 \\ 7 & 7 \\ 1 & \end{array}
 \begin{array}{r|l} 66 & 2 \\ 33 & 3 \\ 11 & 11 \\ 1 & \end{array}
 \begin{array}{l} 126 = 2 \cdot 3^2 \cdot 7 \\ 66 = 2 \cdot 3 \cdot 11 \\ \text{HCF} = 2 \cdot 3 = 6 \\ \text{LCM} = 2 \cdot 3^2 \cdot 7 \cdot 11 = 1386 \end{array}$$

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

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

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

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

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) $3,2507 \times 100 = 325,07$	b) $16,1304 : 100 = 0,161304$
c) $1874,32 : 1000 = 1,87432$	d) $0,4783 \times 10000 = 4783$

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) $3 \times 1,3 = 3,9$

$2 \times 0,5 = 1$

$3,9 + 1 = 4,9$ toneladas transporta el camión

b) $4,9 \times 1000 = 4900$ 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