GLOBAL 1ª EVALUACIÓN

Name:...

1.- Calculate HCF and LCM of: (1 point)
   a) 130 and 52   b) 56 and 49

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

a) $\left[-7+3\right]\div(-1)-(-4) =$

b) $\left(3-1\right)^2-(-5)\text{x}(+2) =$

c) $2\text{x}\left[-2+1\right]^3+6\div3-5\text{x}2 =$

d) $(-12):(+4)+3\text{x}(-2)-(-1)\text{x}7 =$

3.- Calculate: (0.75 points)
 a) $2^2\cdot2^4 =$
 b) $(-1)^3\cdot(-2)^3 =$
 c) $5^3\div5^2 =$

4.- Complete: (0.75 points)

$(+10)^0 =$	$(-1)^{11} =$	$-3^4 =$
$(-3)^4 =$	$\sqrt{+16} =$	$\sqrt{-9} =$

5.- Arrange in ascending order: (0.75 points)
 $-3.231; 0.125; -3.23; 0; -3.11; 0.12; 0.1255; 0.24; -3.05; -3.12$

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6.- Work out these operations: (0.75 points)

a) 3.5076x100 =	b) 6.138÷100 =
c) 851.315÷1000 =	d) 0.1473x10000 =

7.- Round to the nearest thousandths: (0.75 points)

a) 1.32781 →	b) −23.0521→
c) −0.3247 →	d) 115.99564 →

8.- A T-shirt costs £23.60 and a pair of trousers costs £35.80. Álvaro has got £50 and he wants to buy the shirt and the pair of trousers. Is it possible? Why? (0.75 points)

T-shirt   Trousers

9.- This week Marta has worked 37 hours. She earns 12 euros per hour. How much has she earned this week? (0.75 points)

10.- Calculate $\sqrt{3129}$ with two decimal places (1 point)

11.- Place each number on the corresponding line: -1.3; 0.7; 2.25 (0.75 points)

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KEY

1.- Calculate HCF and LCM of:

   a) 130 and 52   b) 56 and 49

130	2	52	2		56	2	49	7
65	5	26	2		28	2	7	7
13	13	13	13		14	2	1	
1		1			7	7		
					1			

$130 = 2 \times 5 \times 13; \quad 52 = 2^2 \times 13$ $56 = 2^3 \times 7; \quad 49 = 7^2$

$HCF(130, 52) = 2 \times 13 = 26$ $HCF(56, 49) = 7$

$LCM(130, 52) = 2^2 \times 5 \times 13 = 260$ $LCM(56, 49) = 2^3 \times 7^2 = 392$

2.- a) $\left[-7+3\right] \div (-1) - (-4) = (-4) \div (-1) + 4 = 4 + 4 = 8$

b) $(3-1)^2 - (-5)x(+2) = 2^2 - (-10) = 4 + 10 = 14$

c) $2x\left[-2+1\right]^3 + 6 \div 3 - 5x2 = 2 \times (-1)^3 + 2 - 10 = -2 + 2 - 10 = -10$

d) $(-12) : (+4) + 3x(-2) - (-1)x7 = -3 + (-6) - (-7) = -3 - 6 - (-7) = -2$

3.- Calculate:

a) $2^2 \cdot 2^4 = 2^6 = 32$

b) $(-1)^3 \cdot (-2)^3 = ((-1) \times (-2))^3 = 2^3 = 8$

c) $5^3 \div 5^2 = 5^1 = 5$

4.- Complete:

$(+10)^0 = 1$	$(-1)^{11} = -1$	$-3^4 = -81$
$(-3)^4 = 81$	$\sqrt{+16} = \pm 4$	$\sqrt{-9} = NO$

5.- Arrange in ascending order:

$-3.231; 0.125; -3.23; 0; -3.11; 0.12; 0.1255; 0.24; -3.05; -3.12$

$-3.231 < -3.23 < -3.12 < -3.11 < -3.05 < 0 < 0.12 < 0.125 < 0.1255 < 0.24$

6.- Work out these operations:

a) $3.5076x100 = 350.76$	b) $6.138 \div 100 = 0.06138$
c) $851.315 \div 1000 = 0.851315$	d) $0.1473x10000 = 1473$

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7.- Round to the nearest thousandths:

a) 1.32781 →1.328	b) –23.0521→-23.052
c) –0.3247 →-0.325	d) 115.99564 →115.996

8.- A T-shirt costs £23.60 and a pair of trousers costs £35.80. Álvaro has got £50 and he wants to buy the shirt and the pair of trousers. Is it possible? Why?

$23.60 + 35.80 = 59.40$
59.40>50

It is not possible, he needs £9.40

9.- This week Marta has worked 37 hours. She earns 12 euros per hour. How much has she earned this week?

$37x12 = 444$
She has earned 444 euros this week

10.- Calculate $\sqrt{3129}$ with two decimal places

$\sqrt{3129}$	55.93
-25	5 x 5 = 25
629	105 x 5 = 525
-525	1109 x 9 = 9981
10400	11183 x 3 = 33549
- 9981	
41900	

11.- Place each number on the corresponding line: -1.3; 0.7; 2.25