

EXAMEN NÚMEROS ENTEROS (INTEGERS)

1.- Work out these operations:

a) $[2 - 5] : (-3) + 7 =$

b) $3 \times (-2) - (-5) \times (+1) + 7 \times (-2) =$

c) $(-4) \times [(-2) + (-3)] + 12 : 6 =$

d) $2 \times (-1) + (-6) \times (+2) - (-4) \times 3 =$

e) $-8 - (-3) + 2 \times (-3) - (-9) =$

2.- Calculate HCF and LCM of:

a) 162 and 72

b) 208 and 160

3.- Arrange in ascending order:

-1, +8, 0, -10, -5, 6, +1, -12, 7



4.- Arrange in descending order:

-12, +5, 1, -10, +6, 13, -7, -13, 11



5.- Fill in the gaps:

a) x^2 is x

b) 2,4,6,8 are numbers

c) $2 < 4$ 2 is4

d) $-1 > -5$ -1 is -5

SOLUCIONES

1.- Work out these operations:

a) $[2-5] : (-3) + 7 = (-3) : (-3) + 7 = 1 + 7 = 8$

b) $3 \times (-2) - (-5) \times (+1) + 7 \times (-2) = -6 - (-5) + (-14) = -6 + 5 - 14 = -15$

c) $(-4) \times [(-2) + (-3)] + 12 : 6 = (-4) \times (-5) + 2 = 20 + 2 = 22$

d) $2 \times (-1) + (-6) \times (+2) - (-4) \times 3 = -2 + (-12) - (-12) = -2 - 12 + 12 = -2$

e) $-8 - (-3) + 2 \times (-3) - (-9) = -8 + 3 + (-6) + 9 = -8 + 3 - 6 + 9 = -2$

2.- Calculate HCF and LCM of:

a) 162 and 72

162	2	72	2
81	3	36	2
27	3	18	2
9	3	9	3
3	3	3	3
1		1	

$$162 = 2 \cdot 3^4$$

$$72 = 2^3 \cdot 3^2$$

$$\text{HCF} = 2 \cdot 3^2 = 18$$

$$\text{LCM} = 2^3 \cdot 3^4 = 648$$

b) 208 and 160

208	2	160	2
104	2	80	2
52	2	40	2
26	2	20	2
13	13	10	2
1		5	5
		1	

$$208 = 2^4 \cdot 13$$

$$160 = 2^5 \cdot 5$$

$$\text{HCF} = 2^4 = 16$$

$$\text{LCM} = 2^5 \cdot 13 \cdot 5 = 2080$$

3.- Arrange in ascending order:

-1, +8, 0, -10, -5, 6, +1, -12, 7

$$-12 < -10 < -5 < -1 < 0 < +1 < 6 < 7 < +8$$

4.- Arrange in descending order:

-12, +5, 1, -10, +6, 13, -7, -13, 11

$$13 > 11 > +6 > +5 > 1 > -7 > -10 > -12 > -13$$

5.- Fill in the gaps:

a) x^2 is **x squared**

b) 2,4,6,8 are **even** numbers

c) $2 < 4$ 2 is **less than** 4

d) $-1 > -5$ -1 is **greater than** -5