

Corrección 1er Control - 1º Evaluación - 2º ESO - Matemáticas

26-09-18

1) a) $4 - 3[6 - 2(-2)] - 3 = 4 - 3[6 + 4] - 3 = 4 - 3[10] - 3 =$
 $= 4 - 30 - 3 = 4 - 33 = \boxed{-29}$

b) $5 - [8 - 12 : (10 - 6)] - 2(+1) = 5 - [8 - 12 : 4] - 2 =$
 $= 5 - [8 - 3] - 2 = 5 - [5] - 2 = 5 - 5 - 2 = 5 - 7 = \boxed{-2}$

c) $4 - 36[9 - 3(3)] + 4 - 6 : (-2) = 4 - 36[9 - 9] + 4 + 3$
 $= 4 - 36 \cdot [0] + 4 + 3 = 4 - 0 + 4 + 3 = \boxed{11}$

d) $5 + 2(-2)[3 - 6 : (6 - 5) + 1] + 2(-3) =$
 $= 5 - 4[3 - 6 : (1) + 1] - 6 = 5 - 4[3 - 6 + 1] - 6 =$
 $= 5 - 4[4 - 6] - 6 = 5 - 4[-2] - 6 = 5 + 8 - 6 = 13 - 6 = \boxed{+7}$

2) a) $360 = \boxed{2^3 \cdot 3^2 \cdot 5}$ b) $252 = \boxed{2^2 \cdot 3^2 \cdot 7}$

$$\begin{array}{r|l} 360 & 2 \cdot 5 \\ 36 & 2 \\ 18 & 2 \\ 9 & 3 \\ 3 & 3 \\ 1 & \end{array}$$

$$\begin{array}{r|l} 252 & 2 \\ 126 & 2 \\ 63 & 3 \\ 21 & 3 \\ 7 & 7 \\ 1 & \end{array}$$

c) $16500 = \boxed{2^2 \cdot 3 \cdot 5^2 \cdot 11}$ d) $1925 = \boxed{5^2 \cdot 7 \cdot 11}$

$$\begin{array}{r|l} 16500 & 2^2 \cdot 5^2 \\ 165 & 5 \\ 33 & 3 \\ 11 & 11 \\ 1 & \end{array}$$

$$\begin{array}{r|l} 1925 & 5 \\ 385 & 5 \\ 77 & 7 \\ 11 & 11 \\ 1 & \end{array}$$

3) a) $12 = 2^2 \cdot 3$
 $48 = 2^4 \cdot 3$
 $60 = 2^2 \cdot 3 \cdot 5$ } $MCD = 2^2 \cdot 3 = 12$
 $mcm = 2^4 \cdot 3 \cdot 5 = 240$

b) $121 = 11^2$
 $44 = 2^2 \cdot 11$ } $MCD = 11$
 $mcm = 2^2 \cdot 11^2 = 484$

c) $60 = 2^2 \cdot 3 \cdot 5$
 $30 = 2 \cdot 3 \cdot 5$
 $75 = 3 \cdot 5^2$ } $MCD = 3 \cdot 5 = 15$
 $mcm = 2^2 \cdot 3 \cdot 5^2 = 300$

4) a) $\sqrt[3]{1728} = 2 \cdot 2 \cdot 2 = 12$ b) $\sqrt[4]{160000} = 2 \cdot 2 \cdot 5 = 20$ c) $\sqrt[5]{7776} = 2 \cdot 3 = 6$

$$\begin{array}{r} 1728 \\ 864 \\ 432 \\ 216 \\ 108 \\ 54 \\ 27 \\ 9 \\ 3 \\ 1 \end{array} \left| \begin{array}{l} 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 3 \\ 3 \\ 3 \end{array} \right.$$

$$\begin{array}{r} 160000 \\ 16000 \\ 1600 \\ 160 \\ 16 \\ 8 \\ 4 \\ 2 \\ 1 \end{array} \left| \begin{array}{l} 5 \\ 5 \\ 5 \\ 5 \\ 2 \\ 2 \\ 2 \\ 2 \end{array} \right.$$

$$\begin{array}{r} 7776 \\ 3888 \\ 1944 \\ 972 \\ 486 \\ 243 \\ 81 \\ 27 \\ 9 \\ 3 \\ 1 \end{array} \left| \begin{array}{l} 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 3 \\ 3 \\ 3 \\ 3 \end{array} \right.$$