



**COLEGIO ALMA'S**  
bilingual school

APELLIDOS Y NOMBRE: Corrección 2º Control  
CURSO: 2º ESO N° 1º Evaluación  
FECHA: 16-10-2017 ASIGNATURA: Matemáticas

1) a)  $2[3-6] - 3[-1+2] = 2(-3) - 3(1) = -6 - 3 = \boxed{-9}$

b)  $-3[9 - 3(8-9)] - 63 : (8-1) = -3(9+3) - 63 : 7 = -36 - 9 = \boxed{-45}$

c)  $6 - 2[5 - (5-2+2)4] = 6 - 2[5 - 5 + 4] = 6 - 8 = \boxed{-2}$

2) a)  $5 - \frac{5}{4} : \left(\frac{20-21}{24}\right) - \frac{2}{3} = 5 + \frac{5}{4} : \left(\frac{-1}{24}\right) - \frac{2}{3} = 35 - \frac{2}{3} = \frac{105-2}{3} = \boxed{\frac{103}{3}}$

b)  $4 \cdot 2 - (25-18) \cdot 7 + (1)^2 = 8 - 1 + 1 = \boxed{8}$

c)  $\frac{3}{4} \cdot \frac{5}{2} \cdot \frac{80}{45} - \left(\frac{10}{60}\right)^{-2} = \frac{10}{3} - 36 = \frac{10-108}{3} = \boxed{\frac{-98}{3}}$

d)  $3 - \left(\frac{5}{3} - \frac{2}{3}\right) + \left(\frac{-1}{2}\right)^2 = 3 - 1 + \frac{1}{4} = \boxed{\frac{9}{4}}$

3)  $11\overline{6} = \frac{116-11}{90} = \frac{105}{90} = \frac{21}{18} = \frac{7}{6}$      $1\overline{9} = \frac{2}{9}$      $22\overline{5} = \frac{225-22}{100} = \frac{9}{4}$

4)  $\frac{(2^2)^2 \cdot 3^5}{2^3 \cdot (3^2)^3} = \frac{2^4 \cdot 3^5}{2^3 \cdot 3^6} = \frac{2}{3}$

$\frac{(5^2)^3 \cdot (2^2 \cdot 3)^2}{(2 \cdot 5)^4} = \frac{5^6 \cdot 2^4 \cdot 3^2}{2^4 \cdot 5^4} = \frac{5^2 \cdot 3^2}{1} = 15^2 = 225$

5)  $\sqrt[4]{810000} = \sqrt[4]{\underbrace{2 \cdot 2 \cdot 2 \cdot 2}_{2^4} \cdot \underbrace{3 \cdot 3 \cdot 3 \cdot 3}_{3^4} \cdot \underbrace{5 \cdot 5 \cdot 5 \cdot 5}_{5^4}} = 2 \cdot 3 \cdot 5 = \boxed{30}$

$\sqrt[3]{3375} = \sqrt[3]{\underbrace{3 \cdot 3 \cdot 3}_{3^3} \cdot \underbrace{5 \cdot 5 \cdot 5}_{5^3}} = 3 \cdot 5 = \boxed{15}$

810000 | 2.5  
81000 | 2.5  
8100 | 2.5  
810 | 2.5  
81 | 3  
27 | 3  
9 | 3

3375 | 5  
675 | 5  
135 | 5  
27 | 3  
9 | 3  
3 | 3  
1 |