COLEGIO ALMA'S
bilingual school

APELLIDOS Y NOMBRE: Corrección Recuperación

CURSO: ..... Nº .....

FECHA: ..... ASIGNATURA: .....

**1.-** a) $4\cdot[6-5\cdot2]^2+32:2^3=4(-4)^2+4=\boxed{68}$

b) $8:(-4)+\sqrt{19}-9(6)=-2+3-54=\boxed{-53}$

c) $25\cdot(-6):2+6:(6)=-75+1=\boxed{-74}$

d) $9^2:9-[15:(6-9)+2]=9-[-5+2]=9-(-3)=9+3=\boxed{12}$

e) $7\cdot(-8)+25\cdot4:(-2)-(4)^2=-56-50-16=\boxed{-122}$

**2.-** $24=2^3\cdot3$, $30=2\cdot3\cdot5$, $18=2\cdot3^2$, $16=2^4$

$MCD=\boxed{2}$

$mcm=2^4\cdot3^2\cdot5=\boxed{720}$

**3.-** a) $\frac{7}{4}:\frac{1}{3}-\frac{5}{6}:\frac{1}{6}=\frac{21}{4}-5=\boxed{\frac{1}{4}}$

b) $5-3\left[\left(\frac{23}{18}\right)\cdot\frac{3}{4}+\frac{5}{6}\right]=5-3\left(\frac{23}{24}+\frac{5}{6}\right)=5-3\,\frac{43}{24}=5-\frac{43}{8}=\boxed{\frac{-3}{8}}$

c) $\frac{3}{2}\cdot\frac{2}{3}-1+2=1-1+2=\boxed{2}$

d) $\frac{1}{4}+\frac{8}{3}\left(\frac{5}{3}\right)-\frac{9}{16}=\frac{1}{4}+\frac{40}{9}-\frac{9}{16}=\frac{2^2\cdot3^2+40\cdot2^4-9\cdot3^2}{2^4\cdot3^2}=\frac{36+640}{2^4\cdot3^2}=81$

$=\boxed{\frac{595}{2^4\cdot3^2}}=\boxed{\frac{595}{144}}$

e) $\frac{1}{3}+\frac{1}{3}+\frac{1}{3}=\boxed{1}$

f) $\frac{8}{3}\cdot\frac{8}{3}-1=$

$1-1=\boxed{0}$

**4.-** $1'2\widehat{36}=\frac{1236-123}{900}=\frac{1113}{900}=\boxed{\frac{371}{300}}$

$1'0\widehat{45}=\frac{1045-10}{990}=\frac{1035}{990}=\frac{207}{198}=\frac{69}{66}=\boxed{\frac{23}{22}}$

$3^{-2}=\frac{1}{3^2}=\boxed{\frac{1}{9}}$

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**5.-** a) $\frac{6^3 \cdot 4^3}{9 \cdot 10^2} = \frac{(2\cdot 3)^3 \cdot (2^2)^3}{3^2 (2\cdot 5)^2} = \frac{2^3 \cdot 3^3 \cdot 2^6}{3^2 \cdot 2^2 \cdot 5^2} = \boxed{\frac{2^7 \cdot 3}{5^2}}$

b) $\frac{10^2}{30^2 \cdot 12^3} = \frac{2^2 \cdot 5^2}{2^2 \cdot 3^2 \cdot 5^2 (2^2 \cdot 3)^3} = \frac{2^2 \cdot 5^2}{2^2 \cdot 3^2 \cdot 5^2 \cdot 2^6 \cdot 3^3} = \frac{2^2 \cdot 5^2}{2^8 3^5 \cdot 5^2} = \boxed{\frac{1}{2^6 \cdot 3^5}}$

**6.-** a) $\sqrt[3]{27000} = 2 \cdot 5 \cdot 3 = \boxed{30}$ b) $\sqrt[4]{1296} = 2 \cdot 3 = \boxed{6}$

| 27000 | 2 |
|---|---|
| 2700 | 2 |
| 270 | 2 |
| 27 | 3 |
| 9 | 3 |
| 3 | 3 |
| 1 | |

| 1296 | 2 |
|---|---|
| 648 | 2 |
| 324 | 2 |
| 162 | 2 |
| 81 | 3 |
| 27 | 3 |
| 9 | 3 |
| 3 | 3 |
| 1 | |

**7.-**

| Nº | Días |
|---|---|
| 12 | 15 |
| 4 | x |

I

$\frac{15}{x} = \frac{4}{12} \rightarrow \frac{15}{x} = \frac{1}{3} \rightarrow \boxed{x = 45 \text{ días}}$

**8.-**

| min | pizzas |
|---|---|
| 30 | 5 |
| x | 12 |

D

$\frac{30}{x} = \frac{5}{12} \rightarrow 5x = 30 \cdot 12 \rightarrow x = \frac{30 \cdot 12}{5}$

$\boxed{x = 72 \text{ min}}$

**9.-**

| Km | horas | Días |
|---|---|---|
| 54 | 4 | 6 |
| 140 | x | 14 |

D I

$\frac{4}{x} = \frac{54}{140} \cdot \frac{14}{6} \rightarrow \frac{4}{x} = \frac{54}{60} = \frac{9}{10}$

$9x = 40 \rightarrow \boxed{x = \frac{40}{9} \text{ horas}}$