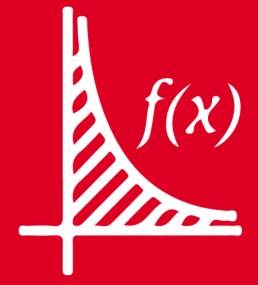


# ALGEBRA Chapter 16





RETROALIMENTACION TOMO 2





#### <u>PROBLEMA 1</u>

#### **Calcule**

$$A = 4^3 + (-5)^2 - 1^{200} + 6^2$$

#### **Resolución**

$$A = 64 + 25 - 1 + 36$$

$$A = 89 + 35$$

**Rpta** 





Efectúe 
$$R = \left(\frac{1}{4}\right)^{-1} + \left(\frac{1}{7}\right)^{-2} + (-3)^4$$

#### Resolución

$$R = (4)^{1} + (7)^{2} + (+81)$$

$$R = 4 + 49 + 81$$

**Rpta** 

$$R = 134$$





Calcule 
$$M = -(-1)^{182} + (-5)^3 + (-10)^2$$

Resolución

**RECUERDA**:

$$(Base\ Negativa)^{Par} = +$$
 $(Base\ Negativa)^{impar} = -$ 

$$M = -(+1) + (-125) - (+100)$$

$$M = -1 - 125 - 100$$

$$M = -226$$





$$B = \frac{3^{a+4}}{3^a} + \frac{5^{a+4}}{5^{a+3}} + \frac{7^{a-1}}{7^{a-1}}$$

$$B = 3^{a+4-(a)} + 5^{a+4-(a+3)} + 7^{a-1-(a-1)}$$

$$B = 3^{\cancel{q}+4-\cancel{q}} + 5^{\cancel{q}+4-\cancel{q}-3} + 7^{\cancel{q}-1-\cancel{p}+1}$$

$$B = 3^4 + 5^1 + 7^0$$

$$B = 81 + 5 + 1$$

$$B = 87$$





### Calcule

$$R = 3^{1-4x}.9^{2-x}.27^{2x-1}$$

$$R = 3^{1-4x}.(3^2)^{2-x}.(3^3)^{2x-1}$$

$$R = 3^{1-4x}.3^{4-2x}.3^{6x-3}$$

$$R = 3^{1-4x+4-2x+6x-3}$$

$$R=3^2$$

$$R=9$$





María Fernanda dice el valor de  $J = \frac{3^{x+2} + 3^x - 3^{x+1}}{7.3^x}$  es 2 y Ricardo

Lucio dice el valor de J es 1. ¿Quién dijo la respuesta correcta?

# Resolución

$$J = \frac{3^{x+2} + 3^x - 3^{x+1}}{7.3^x} = \frac{3^x \cdot 3^2 + 3^x \cdot 1 - 3^x \cdot 3^1}{7.3^x}$$

$$J = \frac{3^{x}.(3^{2}+1-3)}{7.3^{x}} = \frac{3^{x}.(7)}{7.3^{x}}$$

$$J = 1$$



Ricardo Lucio





# Simplifique

$$S = 16^{4^{-1}} + 125^{3^{-1}} - 4^{2^{-1}}$$

$$S = 16^{\frac{1}{4}} + 125^{\frac{1}{3}} - 4^{\frac{1}{2}}$$
$$S = \sqrt[4]{16} + \sqrt[3]{125} - \sqrt{4}$$

$$S=5$$



# Simplifique

$$M = \sqrt[3]{64x^{21}} + \sqrt{16x^{14}} - \sqrt[4]{16x^{28}}$$

$$M = \sqrt[3]{64} \cdot \sqrt[3]{\chi^{21}} + \sqrt{16} \cdot \sqrt{\chi^{14}} - \sqrt[4]{16} \cdot \sqrt[4]{\chi^{28}}$$

$$M = 4 x^7 + 4x^7 - 2x^7$$

$$M = 6x^{7}$$



# Calcula el exponente final de x en

$$A = \sqrt[5]{x} \sqrt[5]{2x} \sqrt[3]{x} ^{1}; x \neq 0$$

$$\overset{\text{Multiplicación}}{\overset{\text{de índices}}{\bigwedge}} \overset{16}{\overset{\chi}} \overset{53}{\overset{}}$$

$$A = \chi^{\frac{53}{16}}$$





Reduzca 
$$A = \sqrt{2} \cdot \sqrt[15]{3}^{15} + \sqrt[6]{2}^{18} - 10 + 1$$

$$\mathbf{A} = \sqrt{2.(3) + 2^3 - 10} + 1$$

$$A = \sqrt{6 + 8 - 10}$$
 +1

$$A = \sqrt{4}$$
 +1 *Luego*  $A = 2 + 1$ 

$$A=3$$