

- ***Nombre:***
- ***Citlally Alejandra
Morales Rubio***
- ***Materia :***
- ***Algebra***
- ***Actividad:***
factotizacion
- ***Grado:1ero***
- ***Grupo : "A"***
***bachillerato técnico en
recursos humanos***

Citlally Alejandra Morales Rubio.
Bachillerato tecnico en recursos humanos.

algebra.
26 / nov. / 2021.
entrega.

factorización

8) $x^2y + x^2z =$

$R = x^2(xy + xz)$

$\frac{x^2y}{x^2} = xy$ $\frac{x^2z}{x^2} = xz$

9) $2a^2x + 6ax^2 =$ $R = 2ax(a + 3x)$

$\frac{2a^2x}{2ax} = a$ $\frac{6ax^2}{2ax} = 3$ } x

10) $8m^2 - 12mn =$ $R = 4m(2m - 3n)$

$$\begin{array}{r|l} 8 & 12 \\ \hline 4 & 6 \\ 2 & 3 \\ 1 & 3 \end{array} \Bigg) 4$$

$\frac{8m^2}{4m} = 2m$

$\frac{12mn}{4m} = 3n$

Citlally Alejandra Morales Rubio.

Continuación...

11) $9a^3x^2 - 18ax^3 =$

$$\begin{array}{r|l} 9 & 18 \\ 3 & 6 \\ 1 & 2 \\ 1 & 1 \end{array} \Bigg| \begin{array}{l} 3 \\ 3 \\ 2 \\ 2 \end{array} \rightarrow 9 \quad \text{R} = 9ax^2 (1a^2 - 2x)$$

$$\frac{9a^3x^2}{9ax^2} = 1a^{(3-1)} \times \cancel{x^{(2-2)}} = 1a^2$$

$$\frac{18ax^3}{9ax^2} = 2a^{(4-1)} \times \cancel{x^{(3-2)}} = 2x$$

12) $15c^3d^2 + 60c^2d^3 =$

$$15c^2d^2 (c + 4d)$$

$$\begin{array}{r|l} 15 & 60 \\ 15 & 30 \\ 15 & 15 \\ 5 & 5 \\ 1 & 1 \end{array} \Bigg| \begin{array}{l} 2 \\ 2 \\ 3 \\ 3 \\ 3 \end{array} \rightarrow 15$$

$$\frac{15c^3d^2}{15c^2d^2} = c \quad \frac{60c^2d^3}{15c^2d^2} = 4d$$

13) $35m^2 - n^3 - 70m^3 =$

$$35m^2 (n^3 - 2m)$$

$$\begin{array}{r|l} 35 & 70 \\ 7 & 14 \\ 1 & 2 \\ 1 & 1 \end{array} \Bigg| \begin{array}{l} 3 \\ 3 \\ 2 \\ 2 \end{array} \rightarrow 35$$

$$\frac{35m^2n^3}{35m^2} = n^3 \quad \frac{70m^3}{35m^2} = 2m$$

Continuación:

$$14) \quad abc + abc^2 =$$

$$abc(1 + c)$$

$$\frac{abc}{abc} = 1 \quad \frac{abc^2}{abc} = \cancel{a} \cancel{b} c^{(2-1)} = c$$

$$15) \quad 24a^2xy^2 - 36x^2y^4 =$$

24	36	②
12	18	②
6	9	②
3	9	③
1	3	3
1	1	

} 12

$$12xy^2(2a^2xy - 3xy^2)$$

$$\frac{24a^2xy^2}{12xy^2} = 2a^2xy$$

$$\frac{36x^2y^4}{12xy^2} = 3xy^2$$

$$16) \quad a^3 + a^2 + a =$$

$$R = a(a^2 + a + 1)$$

$$\frac{a^3}{a} = a^2 \quad \frac{a^2}{a} = a \quad \frac{a}{a} = 1$$

Continuación:

$$17) 4x^2 - 8x + 2 =$$

$$\frac{4 \ 8 \ 2}{2 \ 4 \ 1} \Big/ 2 \quad 2x(2x - 4x - 1x)$$

$$\frac{4x^2}{2x} = 2x \quad \frac{8x}{2x} = 4x \quad \frac{2}{2x} = \frac{1}{x}$$

$$18) 15y^3 + 20y^2 - 5y =$$

$$\frac{15 \ 20 \ 5}{3 \ 4 \ 1} \Big/ 5 \quad 5y(3y^2 + 5y - 1y)$$

$$\frac{15y^3}{5y} = 3y^2 \quad \frac{20y^2}{5y} = 4y \quad \frac{5y}{5y} = 1y$$

$$19) a^3 - a^2x + ax^2 =$$

$$a^2(a^2 - 1ax - 1x)$$

$$\frac{a^3}{a} = a^2 \quad \frac{a^2}{a} = 1ax \quad \frac{ax^2}{a} = 1x$$

Citlally Alejandra Morales Rubio

Continuación:

$$20) 2a^2x + 2ax^2 - 3ax =$$

$$\frac{2a^2x + 2ax^2 - 3ax}{1 \cdot 1 \cdot 3} = 2ax(1a + 1x - 1)$$

$$\frac{2a^2x}{2ax} = 1a \quad \frac{2ax^2}{2ax} = 1x \quad \frac{3ax}{2ax} = 1$$

$$21) x^3 + x^5 - x^7 =$$

$$x^3(1 + x^2 - x^4)$$

$$\frac{x^3}{x^3} = 1 \quad \frac{x^5}{x^3} = x^2 \quad \frac{x^7}{x^3} = x^4$$