 **Nombre:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **Curso:\_\_\_\_\_\_\_\_\_\_ Fecha:\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Guía 7: Multiplicación y división de racionales**

**I.- SITUACIÓN INICIAL**

**El profesor César quiere poner cerámica en los** $\frac{3}{5}$ **de la pared de su baño, la cual mide 2 metros de ancho y 2,5 metros de alto.**

**Dibuja una representación gráfica de la situación planteada.**

**¿Cuántos metros cuadrados de la pared quedarán cubiertos por cerámica?**

 **Área de la pared**

$\frac{3}{5}$ **· m · m =** $\frac{3}{5}$ **· m2 = m2**

 **Ancho de Alto de**

 **la pared la pared**

**II.- ZONA DE APRENDIZAJE**

**Para multiplicar fracciones se multiplican los numeradores con los numeradores y los denominadores con los denominadores.**

**Par dividir fracciones se multiplica el dividendo por el inverso multiplicativo del divisor.**

**Para resolver multiplicaciones y divisiones entre fracciones y números decimales se pueden expresar ambas como fracción o como decimal.**

**Ejemplo:**

**Realiza los siguientes ejercicios en tu cuaderno**

1. $\frac{9}{5}$ **:** $\frac{5}{6}$
2. $\frac{8}{4}$ **·** $\frac{5}{4}$

**Guíate por la explicación del profesor.**

**III.- ZONA DE EJERCICIOS**

**1.- Identifica el dibujo que representa el producto** $\frac{2}{3}$ **·** $\frac{3}{5}$**, luego, enciérralo.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

 |

|  |  |
| --- | --- |
|  |  |
|  |  |
|  |  |

 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

 |

**2.- Analiza cada expresión. Luego, completa con el término que falta.**

**A.** $\frac{1}{3}$ **· \_\_\_\_ =** $(-\frac{2}{5}$ **) B. \_\_\_\_ · (- 6,8) = 2,72**

**C. (-** $\frac{5}{9}$**) : \_\_\_\_ =** $\frac{5}{3}$ **D.** $\frac{2}{7}$ **: \_\_\_\_ =** $\frac{9}{2}$

**E. 1,5 : \_\_\_\_ =** $\frac{7}{4}$ **F. (- 1** $\frac{4}{7}$**) · \_\_\_\_ =** $\frac{2}{3}$

**3.- Resuelve los siguientes problemas**

**A. Joaquín colecciona monedas, entre las cuales tiene 120 chilenas que corresponden** $\frac{5}{8}$ **del total. ¿Cuántas monedas tiene Joaquín en total?**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**B. Trinidad quiere envasar 13**$\frac{1}{2}$ **litros de jugo natural en botellas de** $\frac{3}{4}$ **de litro. ¿Cuántas botellas se pueden llenar completamente?¿Sobrará jugo?**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**IV.- CONCLUYENDO**

**Responde en tu cuaderno las siguientes preguntas:**

**¿Qué significa inverso aditivo? Da un ejemplo.**

**¿Qué significa inverso multiplicativo? Da un ejemplo.**