

ACTIVIDADES CUARTA UNIDAD

LECCIÓN #3

$$\textcircled{1} \frac{2x+4}{x+y} \cdot \frac{x^2-y^2}{4x+8} =$$

$$\frac{2(x+2)}{(x+y)} \cdot \frac{(x+y)(x-y)}{4(x+2)} =$$

$$\frac{2}{1} \cdot \frac{(x-y)}{4} = \boxed{\frac{(x-y)}{2}}$$

$$\textcircled{2} \frac{y^2+8y+15}{y^2-25} \cdot \frac{4y-20}{4x+8} =$$

$$\frac{(y+5)(y+3)}{(y+5)(y-5)} \cdot \frac{4(y-5)}{4(x+2)}$$

$$\frac{(y+3)}{(y-5)} \cdot \frac{4}{(4x+2)}$$

$$\boxed{\frac{y+12}{4x+2}}$$

$$\textcircled{3} \frac{x^3 + 64}{x^2 - 16} \cdot \frac{6x - 24}{x^3 - 4x^2 + 16x} =$$

$$\frac{x^3 + 64}{x - 4} \cdot \frac{6(x - 24)}{x(x^2 - 4x + 16)}$$

$$\boxed{\frac{6x^3 - 1536}{x^2 - x}}$$

$$\textcircled{4} \frac{5x^2 + 13x - 6}{4 - 25x} \cdot \frac{10x + 4}{9 - x^2} =$$

$$\frac{5x^2 - 15x - 2x - 6}{4 - 25x} \cdot \frac{10x - 4}{9 - x^2} =$$

$$\frac{5x(x + 3) - 2(x + 3)}{4 - 25x} \cdot \frac{10x - 4}{9 - x^2}$$

$$\frac{(x + 3)(5x - 2)}{4 - 25x} \cdot \frac{10x + 4}{9 - x^2}$$

$$\frac{(x + 3)(5x - 2)}{4 - 25x} \cdot \frac{2(5x + 2)}{3^2 - x^2}$$

$$\boxed{\frac{2(5x - 2)(5x + 2)}{(4 - 25x)(3 - x)}}$$