

ACTIVIDADES CUARTA UNIDAD

LECCION #4

$$\textcircled{1} \frac{2y - 14}{y^2 - 2y - 35} \div \frac{6y - 30}{y^2 - 25}$$

$$\frac{(2y - 14)(y^2 - 25)}{(y^2 - 2y - 35)(6y - 30)} = \frac{2y + y^2 + 350}{y^2 - 12y^2 + 1050}$$

$$\frac{2y + 350}{-12y^2 + 1050} = \frac{175}{6y + 525}$$

$$\textcircled{2} \frac{9x - 27}{15x + 30} \div \frac{6x^2 - 18}{14 - 7}$$

$$\frac{(9x - 27)(14 - 7)}{(15x + 30)(6x^2 - 18)} = \frac{126x - 189}{90x^3 - 540}$$

$$\frac{42 - 63}{30x^2 - 180} =$$

$$\textcircled{3} \frac{25x^3y^4}{36m^4n} \div \frac{10x^2y^3}{18m^2n}$$

$$\frac{(25x^3y^4)(18m^2n)}{(36m^4n)(10x^2y^3)} = \frac{450x^3y^4m^2n}{360x^2y^3m^4n}$$

$$\frac{225xy^2}{180} = \frac{75}{60} = \frac{25}{20} = \boxed{\frac{5xy^2}{4}}$$

$$\textcircled{4} \frac{6xy}{5y^2} \div \frac{3x}{10y} =$$

$$\frac{(6xy)(10y)}{(5y^2)(3x)} = \frac{60xy^2}{15xy^2} = \frac{20}{5} = \boxed{\frac{4}{1}}$$

$$\textcircled{5} \frac{3m}{8n^2} \div \frac{9m}{16n^2} =$$

$$\frac{(3m)(16n^2)}{(8n^2)(9m)} = \frac{48mn^2}{72mn^2} = \frac{24}{36}$$

$$\frac{12}{18} = \frac{6}{9} = \boxed{\frac{2}{3}}$$