

Actividades cuarta unidad semana 4

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

$$\frac{2(y-7)}{y^2-2y-35} \div \frac{6y-30}{y^2-25} =$$

$$\frac{2(y-7)}{(y-7)(y-5)} \div \frac{6y-30}{y^2-25} =$$

$$\frac{2}{y+5} \div \frac{6y-30}{y^2-25} = \frac{2}{y+5} \div \frac{6(y-5)}{y^2-25}$$

$$\frac{2}{y+5} \div \frac{6}{y+5} = \frac{1}{3}$$

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

$$\frac{9(x-3)}{15x+30} \div \frac{6x^2-18}{14-7x} = \frac{9(x-3)}{15(x+2)} \div \frac{6x^2-18}{14-7x} =$$

$$\frac{3(x-3)}{5(x+2)} \div \frac{6x^2-18}{14-7x} = \frac{3(x-3)}{5(x+2)} \cdot \frac{14-7x}{6x^2-18} =$$

$$\frac{3(x-3)}{5(x+2)} \cdot \frac{7(2-x)}{6(x^2-3)} = \frac{x-3}{5(x+2)} \cdot \frac{7(2-x)}{2(x^2-3)}$$

$$\frac{(x-3)}{5(x+2)} \times \frac{7(2-x)}{2(x^2-3)}$$

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

$$\frac{450m^2n \times 3y^4}{360m^4n \times 2y^3} = \frac{225}{180} \cdot \frac{xy}{m^2} = \frac{5xy}{4m^2}$$

$$\frac{5xy}{4m^2}$$

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

$$\frac{20}{5} = \frac{4}{1}$$

$$5) \frac{3m}{8n^2} \div \frac{9m}{16n^2} = \frac{(3m)}{(8n^2)} \frac{(16n^2)}{(9m)} = \frac{48mn^2}{72mn^2} =$$

$$\frac{24}{36} = \frac{12}{18} = \frac{6}{9} = \frac{2}{3} /$$