

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

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

$$\frac{2(\cancel{y-7})(\cancel{y+5})(\cancel{y-5})}{(\cancel{y+7})(\cancel{y+5}) \underset{3}{\cancel{6}}(\cancel{y-5})} \cdot \frac{1}{3} //$$

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

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

$$= \frac{63(x-3)(2-x)}{(15x+30)(6x^2-18)}$$

$$= \frac{63(x-3)(2-x)}{90(x+2)(x^2-3)}$$

$$= \frac{7(x-3)(-x+2)}{10(x+2)(x^2-3)} //$$

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

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

$$\begin{array}{r} \cancel{1}^1 \\ 25 \cancel{x}^3 y^4 \div \frac{\cancel{18}^3 m^2 n}{10x^2 \cancel{y}^3} \\ \hline 36 m^4 n \\ m^2 \end{array} \quad \begin{array}{r} \cancel{18}^3 \\ 10x^2 \cancel{y}^3 \\ 2 \\ \hline 34 \\ 2m^2 \end{array}$$

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

$$\frac{\cancel{6}^2 x y \cdot \cancel{10}^2 y}{5y^2 \cdot 3x} = \underline{\underline{4}}$$

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

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

$$\frac{\overset{1}{\cancel{3}m} \cdot \overset{2}{\cancel{4}} \cancel{16}n^2}{\cancel{8}n^2 \cdot \overset{3}{\cancel{9}m}} = \frac{2}{3}$$

$\cancel{4}$
 $\cancel{2}$
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