

wed 10-3-18

went over problems to prepare for quiz

$$\textcircled{1} \frac{28x^2y^3}{36x^4y} \rightarrow \frac{28 \cdot \cancel{x} \cdot \cancel{x} \cdot y \cdot y \cdot \cancel{y}}{36 \cdot \cancel{x} \cdot \cancel{x} \cdot \cancel{x} \cdot y} \rightarrow \frac{28y^2}{36x^2} \rightarrow \boxed{\frac{7y^2}{9x^2}}$$

$$\textcircled{2} \frac{x^2-x-20}{x^2-8x+15} \rightarrow \frac{(x-5)(x+4)}{(x-5)(x-3)} \rightarrow \boxed{\frac{(x+4)}{(x-3)}}$$

$$\textcircled{3} \frac{4x^2-25}{15-6x} \rightarrow \frac{(2x-5)(2x+5)}{3(5-2x)} \rightarrow \boxed{-\frac{2x+5}{3}}$$

$$\textcircled{4} \frac{3x-6}{8} \div \frac{12-6x}{4} \rightarrow \frac{3x-6}{8} \times \frac{4}{12-6x} \rightarrow \frac{(1)(\cancel{3})(x-2)}{2(\cancel{6})(\cancel{2})(2-x)} \rightarrow \boxed{-\frac{1}{4}}$$

$$\textcircled{5} \frac{x^2+4x-21}{x^2-4} \div \frac{3x+21}{6x+12}$$

$$\frac{x^2+4x-21}{x^2-4} \cdot \frac{6x+12}{3x+21} \rightarrow \frac{(x+7)(x-3)^2 \cancel{6}(x+2)}{(x+2)\cancel{3}(x-2)\cancel{3}(x+7)} \rightarrow \boxed{\frac{2(x-3)}{(x-2)}}$$

$$\textcircled{6} \frac{x^2-6x+8}{x^2-4} \rightarrow \frac{(x-4)(x-2)}{(x+2)(x-2)} \rightarrow \boxed{\frac{(x-4)}{(x+2)}}$$

$$\textcircled{7} \frac{27xy^3}{30xy} \rightarrow \frac{27 \cdot \cancel{x} \cdot y \cdot y \cdot y}{10 \cdot \cancel{30} \cdot \cancel{x} \cdot y} = \boxed{\frac{9y^2}{10}}$$