

Practice Rational Functions

[- + ÷ x]

Simplify and state any restrictions on the variable

$$\textcircled{1} \quad \frac{2x}{4x^2 - 2x} \rightarrow$$

$$\textcircled{2} \quad \frac{z^2 - 49}{z + 7} \rightarrow$$

$$\textcircled{3} \quad \frac{2x + 10}{x^2 + 10x + 25} \rightarrow$$

Multiply. (You don't need to state restrictions)

$$\textcircled{4} \quad \frac{4n^2}{5m} \cdot \frac{7m}{12n^4}$$

$$\textcircled{5} \quad \frac{2x + 12}{3x - 9} \cdot \frac{2x - 6}{3x + 8}$$

Divide

$$\textcircled{6} \quad \frac{6x + 6y}{x - y} \div \frac{18}{5x - 5y}$$

$$\textcircled{7} \quad \frac{2n}{5} + \frac{3}{2n} - \frac{n}{4}$$

$$\textcircled{8} \quad \frac{3}{4x} - \frac{2}{x^2}$$

$$\textcircled{9} \quad \frac{2m^2 + m}{(2m+1)^2} - \frac{3}{2m+1}$$

$$\textcircled{10} \quad \frac{6x-4}{3x^2-17x+10} - \frac{1}{x^2-2x-15}$$

Hint: FACTOR ASAP