

Multiplying and Dividing Rational Expressions Practice

Simplify Each Expression Completely

1.) $\frac{2xy^2}{3x^2} * \frac{x^2y^3}{4y}$

2.) $\frac{2y}{6x^2} * \frac{3xy}{y^5}$

3.) $\frac{7x-28}{x-4} * \frac{1}{14x+2}$

4.) $\frac{9x-36}{5x^3-35x^2} * \frac{5x^2}{3}$

5.) $\frac{2xy^3}{3x^2y^5} \div \frac{6x^2y}{15x^4y^3}$

6.) $\frac{x+3}{4} \div \frac{3x+9}{x-6}$

7.) $\frac{(y-7)(x+8)}{(z-10)} \div \frac{x+8}{z-10}$

8.) $\frac{x-8}{(x+6)(x+10)} * \frac{4x(x+10)}{(x+6)(x-8)}$

Simplify completely, be CAREFUL you may have to factor!

$$9.) \frac{x^2+7x-8}{x+8} * \frac{x+5}{x-1}$$

$$10.) \frac{x^2-16}{x-9} * \frac{x^2+x-90}{x^2+14x+40}$$

$$11.) \frac{x+7}{x^2-9} \div \frac{x^2+14x+49}{x+3}$$

$$12.) \frac{x^2-25}{x^2-3x-10} \div \frac{x+5}{x^2-4}$$

$$13.) \frac{9x-36}{3x^2+6x+3} * \frac{x^2+8x+7}{x-4}$$

$$14.) \frac{x^2+x-12}{x^2+3x+2} \div \frac{x^2+2x-15}{x^2-1}$$