

C11 - 6.3 - Multiplying Rationals WS

Multiply, Simplify and State Restrictions. Leave answer in factored form.

$$\frac{3}{4} \times \frac{1}{2} =$$
$$\frac{3 \times 1}{4 \times 2} = \frac{3}{8}$$

$$\frac{3}{4x} \times \frac{1}{2} =$$

$$\frac{3x^3}{2} \times \frac{4}{x^2} =$$

$$\frac{2}{5x} \times \frac{3x}{4} =$$

$$\frac{1}{x+2} \times (x+2) =$$

$$\frac{1}{x+3} \times (x+2)(x+3) =$$

$$\frac{1}{(x+2)(x+3)} \times (x+2) =$$

$$\frac{x+2}{x+1} \times \frac{3}{x+2} =$$

$$\frac{2(x+2)}{3} \times \frac{6}{x+2} =$$

$$\frac{2x+4}{x+1} \times \frac{3}{x+2} =$$

$$\frac{3}{(x-1)} \times \frac{2}{(x+2)} =$$

$$\frac{x+1}{5} \times \frac{3}{(x+1)(x-2)} =$$

$$\frac{4}{x^2+5x+6} \times \frac{x+3}{9} =$$

$$\frac{x^2-64}{4} \times \frac{2}{x+8} =$$

$$\frac{4}{x^2-x-6} \times \frac{x^2+5x+6}{3} =$$

$$(x-5)(x^2-1) \times \frac{1}{x^2-6x+5} =$$

$$\frac{5}{x-5} \times (5-x) =$$

$$\frac{2x^2-x-6}{x+3} \times \frac{x^2-9}{x^2-4} =$$

C11 - 6.3 - Dividing Rationals WS

Divide, Simplify and State Restrictions. Leave answer in factored form.

$$\frac{x}{3} \div \frac{5}{2} =$$

$$\frac{x}{7} \div \frac{9}{2x^3} =$$

$$\frac{x}{2} \div \frac{2x^2 - 4x}{x + 3} =$$

$$\frac{3}{x^2 - 1} \div \frac{5}{x - 1} =$$

$$\frac{1}{x^2 + x} \div \frac{5}{x + 1} =$$

$$\frac{x^2 + 5x + 6}{7} \div \frac{(x + 2)}{4} =$$

$$\frac{3x^2 - 3}{5} \div \frac{6x + 6}{7}$$

$$\frac{2x^2 + 10x + 12}{5} \div \frac{2x + 6}{5} =$$

$$\frac{x}{6} \div \frac{x(x + 1)}{2} =$$

$$\frac{2x^2 - x - 6}{x + 2} \div \frac{x^2 - 4}{x^2 + 5x + 6} =$$