

Perform the indicated operations. Don't forget to list the restrictions!

1.
$$\frac{4x^2-121}{6x-33}$$

2.
$$\frac{4x^2-49}{3x^2} \div \frac{28+8x}{10x}$$

3.
$$\frac{x^2+11x+30}{x^2-9x-10} \cdot \frac{x^2-7x-8}{x^2-3x-40}$$

4.
$$\frac{\frac{x^2+2x-48}{x^2-6x}}{\frac{x^2-36}{7x^2-42x}}$$

5.
$$\frac{8-2x}{x^2-6x+8}$$

6.
$$\frac{x^2-x}{x^2+13x-14} \cdot \frac{x^2+11x-42}{x^2-9}$$

$$7. \frac{3x^2+11x+10}{6x+10}$$

$$8. \frac{x^2-81}{36-4x} \div \frac{x^2+2x-63}{2x-14}$$

$$9. \frac{\frac{4x-12}{3x^2-6x}}{\frac{2x^2-6x}{5x^3-10x^2}}$$

$$10. \frac{x^2-5x}{x^2-12x+35} \cdot \frac{x^2-8x-33}{2x^3+6x^2}$$

$$11. \frac{2x^2-7x-30}{6x^2+x-35}$$

$$12. \frac{x^2-2x-8}{8x+24} \div \frac{2x-8}{x^2+7x+12}$$