Rational × ÷ — Both operations

Name: _____ Date: _____

Multiply or divide, then cancel. Write each answer as one fraction.

1. $\frac{(x+4)}{(x-7)} \div \frac{(x-8)}{(x-7)}$

2. $\frac{(x+8)}{(x-6)} \times \frac{(x-6)}{(x-8)}$

3. $\frac{(x-3)}{(x+8)} \div \frac{(x-6)}{(x+8)}$

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

5. $\frac{(x-2)}{(x-1)} \times \frac{(x-1)}{(x+9)}$

6. $\frac{(x-5)}{(x-2)} \times \frac{(x-2)}{(x-9)}$

7. $\frac{(x-4)}{(x+9)} \times \frac{(x+9)}{(x-7)}$

8. $\frac{(x+4)}{(x-3)} \div \frac{(x+8)}{(x-3)}$

Rational × ÷ · Both operations — Answer key

1. $\frac{x+4}{x-7} \div \frac{x-8}{x-7} = \frac{x+4}{x-8}$ $(x \neq 7, 8)$

2. $\frac{x+8}{x-6} \times \frac{x-6}{x-8} = \frac{x+8}{x-8}$ $(x \neq 6, 8)$

3. $\frac{x-3}{x+8} \div \frac{x-6}{x+8} = \frac{x-3}{x-6}$ $(x \neq -8, 6)$

4. $\frac{x-8}{x+6} \div \frac{x+8}{x+6} = \frac{x-8}{x+8}$ $(x \neq -8, -6)$

5. $\frac{x-2}{x-1} \times \frac{x-1}{x+9} = \frac{x-2}{x+9}$ $(x \neq -9, 1)$

6. $\frac{x-5}{x-2} \times \frac{x-2}{x-9} = \frac{x-5}{x-9}$ $(x \neq 2, 9)$

7. $\frac{x-4}{x+9} \times \frac{x+9}{x-7} = \frac{x-4}{x-7}$ $(x \neq -9, 7)$

8. $\frac{x+4}{x-3} \div \frac{x+8}{x-3} = \frac{x+4}{x+8}$ $(x \neq -8, 3)$