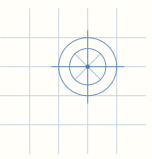


Rational $\times \div$ — Dividing



Name: _____

Date: _____

Divide and cancel. Write each answer as one fraction.

$$\begin{aligned} \textcircled{1} \quad & \frac{(x+3)}{(x+1)} \div \frac{(x-5)}{(x+1)} \\ & \frac{x+3}{x+1} \times \frac{x+1}{x-5} \\ & (x+1) \text{ cancels} \\ & \frac{x+3}{x-5} \\ & x \neq -1, 5 \end{aligned}$$

$$\textcircled{2} \quad \frac{(x+4)}{(x+3)} \div \frac{(x+8)}{(x+3)}$$

$$\textcircled{3} \quad \frac{(x-6)}{(x-5)} \div \frac{(x-2)}{(x-5)}$$

$$\textcircled{4} \quad \frac{(x+9)}{x} \div \frac{(x-2)}{x}$$

$$\textcircled{5} \quad \frac{(x-3)}{(x-6)} \div \frac{(x+8)}{(x-6)}$$

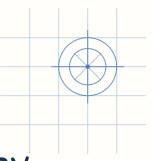
$$\textcircled{6} \quad \frac{(x-7)}{(x-3)} \div \frac{x}{(x-3)}$$

$$\textcircled{7} \quad \frac{(x+2)}{(x-3)} \div \frac{(x-2)}{(x-3)}$$

$$\textcircled{8} \quad \frac{(x+2)}{(x+5)} \div \frac{(x+6)}{(x+5)}$$



Rational $\times \div \cdot$ Dividing — Answer key



$$1. \frac{x+3}{x+1} \div \frac{x-5}{x+1} = \frac{x+3}{x-5} \quad (x \neq -1, 5)$$

$$2. \frac{x+4}{x+3} \div \frac{x+8}{x+3} = \frac{x+4}{x+8} \quad (x \neq -8, -3)$$

$$3. \frac{x-6}{x-5} \div \frac{x-2}{x-5} = \frac{x-6}{x-2} \quad (x \neq 2, 5)$$

$$4. \frac{(x+9)}{x} \div \frac{(x-2)}{x} = \frac{x+9}{x-2} \quad (x \neq 0, 2)$$

$$5. \frac{x-3}{x-6} \div \frac{x+8}{x-6} = \frac{x-3}{x+8} \quad (x \neq -8, 6)$$

$$6. \frac{x-7}{x-3} \div x/(x-3) = (x-7) / x \quad (x \neq 0, 3)$$

$$7. \frac{x+2}{x-3} \div \frac{x-2}{x-3} = \frac{x+2}{x-2} \quad (x \neq 2, 3)$$

$$8. \frac{x+2}{x+5} \div \frac{x+6}{x+5} = \frac{x+2}{x+6} \quad (x \neq -6, -5)$$