

CW 4.2: Multiplying and Dividing Rational Expressions

Name: \_\_\_\_\_

Simplify each expression.

$$1) \frac{12(b-3)}{(b-3)} \cdot \frac{2b}{12(b-10)}$$

$$6) \frac{p^2 + 3p - 4}{p^2 + 15p + 56} \cdot \frac{1}{p-1}$$

$$2) \frac{5g}{g+8} \div \frac{5g}{3g+24}$$

$$7) \frac{r^2 + 13r + 42}{r^2 + 3r + 2} \div \frac{1}{r+2}$$

$$3) \frac{11q}{3} \div \frac{4}{10}$$

$$8) \frac{6h-6}{h^2+23h+132} \cdot \frac{h+12}{6h-6}$$

$$4) \frac{z^2 + 19z + 90}{z+9} \cdot \frac{z+10}{8}$$

$$9) \frac{y^2 + y - 56}{4y} \div (y-7)$$

$$5) \frac{c^2 + 14c + 24}{c^2 + 23c + 132} \div \frac{1}{c+11}$$

$$10) \frac{11}{(x-3)} \cdot \frac{2x+18}{(x+9)}$$