

Name : _____

Score : _____

Teacher : _____

Date : _____

Multiplying Rational Expressions

Simplify each expression.

$$1) \frac{35b^2 - 35b}{14b^2 - 14b} \cdot \frac{3b}{3}$$

$$6) \frac{3g - 3}{g^2 + 14g + 48} \cdot \frac{g + 6}{3g - 3}$$

$$2) \frac{11}{4} \cdot \frac{12}{6y}$$

$$7) \frac{(d - 9)(d + 11)}{d - 9} \cdot \frac{8}{(d + 10)(d - 9)}$$

$$3) \frac{10(h - 8)}{(h - 8)} \cdot \frac{4h}{10(h + 12)}$$

$$8) \frac{k^2 + 13k + 30}{k + 3} \cdot \frac{k + 10}{9}$$

$$4) \frac{(x + 10)(x + 3)}{x + 10} \cdot \frac{9}{(x + 11)(x + 10)}$$

$$9) \frac{12(c + 6)}{6} \cdot \frac{10c}{12(c + 6)}$$

$$5) \frac{3}{(p - 7)} \cdot \frac{2p + 10}{(p + 5)}$$

$$10) \frac{6}{2} \cdot \frac{11}{9}$$



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$$1) \frac{35b^2 - 35b}{14b^2 - 14b} \cdot \frac{3b}{3}$$

$$\frac{5b}{2}$$

$$2) \frac{11}{4} \cdot \frac{12}{6y}$$

$$\frac{11}{2y}$$

$$3) \frac{10(h - 8)}{(h - 8)} \cdot \frac{4h}{10(h + 12)}$$

$$\frac{4h}{h + 12}$$

$$4) \frac{(x + 10)(x + 3)}{x + 10} \cdot \frac{9}{(x + 11)(x + 10)}$$

$$\frac{9(x + 3)}{(x + 11)(x + 10)}$$

$$5) \frac{3}{(p - 7)} \cdot \frac{2p + 10}{(p + 5)}$$

$$\frac{6}{p - 7}$$

$$6) \frac{3g - 3}{g^2 + 14g + 48} \cdot \frac{g + 6}{3g - 3}$$

$$\frac{1}{g + 8}$$

$$7) \frac{(d - 9)(d + 11)}{d - 9} \cdot \frac{8}{(d + 10)(d - 9)}$$

$$\frac{8(d + 11)}{(d + 10)(d - 9)}$$

$$8) \frac{k^2 + 13k + 30}{k + 3} \cdot \frac{k + 10}{9}$$

$$\frac{(k + 10)^2}{9}$$

$$9) \frac{12(c + 6)}{6} \cdot \frac{10c}{12(c + 6)}$$

$$\frac{5c}{3}$$

$$10) \frac{6}{2} \cdot \frac{11}{9}$$

$$\frac{11}{3}$$

