

Name : _____

Score : _____

Teacher : _____

Date : _____

Multiplying Rational Expressions

Simplify each expression.

1) $\frac{2}{12} \cdot \frac{6}{5}$

6) $\frac{10}{2} \cdot \frac{8}{11}$

2) $\frac{4(z - 10)}{10} \cdot \frac{3z}{4(z - 10)}$

7) $\frac{3c + 3}{c^2 + 19c + 84} \cdot \frac{c + 12}{3c + 3}$

3) $\frac{h^2 + 22h + 120}{h + 12} \cdot \frac{h + 10}{3}$

8) $\frac{9x(x - 10)}{(x - 10)(x + 4)} \cdot \frac{x + 4}{(x - 2)(x + 6)}$

4) $\frac{g^2 + 23g + 132}{g + 11} \cdot \frac{g + 12}{2}$

9) $\frac{33b^2 + 33b}{22b^2 + 22b} \cdot \frac{7b}{7}$

5) $\frac{(n + 7)(n + 10)}{n + 7} \cdot \frac{9}{(n - 2)(n + 7)}$

10) $\frac{12}{11} \cdot \frac{4}{10k}$



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Multiplying Rational Expressions

Simplify each expression.

1) $\frac{2}{12} \cdot \frac{6}{5}$

$$\frac{1}{5}$$

6) $\frac{10}{2} \cdot \frac{8}{11}$

$$\frac{40}{11}$$

2) $\frac{4(z - 10)}{10} \cdot \frac{3z}{4(z - 10)}$

$$\frac{3z}{10}$$

7) $\frac{3c + 3}{c^2 + 19c + 84} \cdot \frac{c + 12}{3c + 3}$

$$\frac{1}{c + 7}$$

3) $\frac{h^2 + 22h + 120}{h + 12} \cdot \frac{h + 10}{3}$

$$\frac{(h + 10)^2}{3}$$

8) $\frac{9x(x - 10)}{(x - 10)(x + 4)} \cdot \frac{x + 4}{(x - 2)(x + 6)}$

$$\frac{9x}{(x - 2)(x + 6)}$$

4) $\frac{g^2 + 23g + 132}{g + 11} \cdot \frac{g + 12}{2}$

$$\frac{(g + 12)^2}{2}$$

9) $\frac{33b^2 + 33b}{22b^2 + 22b} \cdot \frac{7b}{7}$

$$\frac{3b}{2}$$

5) $\frac{(n + 7)(n + 10)}{n + 7} \cdot \frac{9}{(n - 2)(n + 7)}$

$$\frac{9(n + 10)}{(n - 2)(n + 7)}$$

10) $\frac{12}{11} \cdot \frac{4}{10k}$

$$\frac{24}{55k}$$

