

Multiplying Rational Expressions

Date _____ Period _____

Simplify each expression.

1) $\frac{9}{6} \cdot \frac{5n}{6n}$

2) $\frac{2}{5p^5} \cdot \frac{10}{9p}$

3) $\frac{5}{3x^3} \cdot \frac{4x^2}{7}$

4) $\frac{7x^2}{6x} \cdot \frac{7}{2}$

5) $\frac{10(m+1)}{m+1} \cdot \frac{2(m-6)}{10(m-6)}$

6) $\frac{6k(k+4)}{7k(3k+8)} \cdot \frac{7k(3k+8)}{6k}$

7) $\frac{6v^2(v+7)}{v+1} \cdot \frac{(1-v)(v-9)}{(v-1)(v-9)}$

8) $\frac{6-p}{p-6} \cdot \frac{7(p-4)}{(p+7)(p-4)}$

$$9) \frac{7-x}{x^2-15x+56} \cdot \frac{10x^2-80x}{5}$$

$$10) \frac{2p^3-2p^2}{3} \cdot \frac{3}{2p^2}$$

$$11) \frac{4}{x^2-81} \cdot \frac{10x^2+90x}{10x}$$

$$12) \frac{1}{k+9} \cdot \frac{k^2+5k-36}{k-10}$$

$$13) \frac{x+9}{3x-27} \cdot \frac{2x^3-16x^2}{x^2+x-72}$$

$$14) \frac{x^2+x-20}{x^2-6x+8} \cdot \frac{x^2-11x+10}{5-4x-x^2}$$

$$15) \frac{2x-2}{x-1} \cdot \frac{5x-5}{5x-15}$$

$$16) \frac{4k^2+4k}{k+4} \cdot \frac{4k+16}{4k+28}$$