Dividing Rational Expressions

Date_____ Period____

Simplify each expression.

1) $\frac{10}{8m} \div \frac{2}{6m^2}$

2) $\frac{9v^2}{6} \div \frac{10v}{5v^5}$

3) $\frac{2x^3}{10x} \div \frac{10}{8x}$

4) $\frac{4}{10} \div \frac{8n^3}{3}$

5) $\frac{9(x+8)}{9} \div \frac{(x-4)(x+8)}{9x}$

6) $\frac{3(m-3)}{(m+2)(m+7)} \div \frac{m-3}{m+7}$

7) $\frac{10(n+2)}{8n(n-9)} \div \frac{10}{n-9}$

8) $\frac{5(m+10)}{(m+9)(m-9)} \div \frac{m+10}{m-9}$

9) $\dfrac{1}{x+7} \div \dfrac{3x}{x^2+4x-21}$

10) $\dfrac{x^2+9x-10}{6x-6} \div \dfrac{x+10}{x+1}$

11) $\dfrac{8}{r-4} \div \dfrac{2}{2r-8}$

12) $\dfrac{n^2+8n+7}{10} \div \dfrac{n^2+8n+7}{9}$

13) $\dfrac{n-7}{6n-42} \div \dfrac{5n^3-25n^2}{6n-6}$

14) $\dfrac{15k-27}{10k^3+90k^2} \div \dfrac{15k-27}{8}$

15) $\dfrac{a^2-6a-7}{a^2-9a-10} \div \dfrac{2a+4}{a+2}$

16) $\dfrac{9b+27}{-b^2+12b-27} \div \dfrac{12+b-b^2}{b^2-13b+36}$