Math 2   Name_____
Unit 5.5 Multiply and Divide Rational Expressions Practice   Period____

Simplify each and state the excluded values.

1) $\dfrac{10}{3} \div \dfrac{3a}{10}$

2) $\dfrac{4}{2} \cdot \dfrac{7v}{5}$

3) $\dfrac{6}{7x} \div \dfrac{2}{7}$

4) $\dfrac{4b^2}{4} \cdot \dfrac{7}{2b}$

5) $\dfrac{4}{9x^3} \div \dfrac{8}{9}$

6) $\dfrac{2}{9} \cdot 5x$

7) $\dfrac{9m(7m+2)}{9m(2m+7)} \cdot \dfrac{10(2m+7)}{7m+2}$

8) $\dfrac{2n(2n+3)}{2n} \cdot \dfrac{5}{(n+3)(2n+3)}$

9) $\dfrac{3k(2k+5)}{3k} \cdot \dfrac{(k+7)(k-8)}{2k^2(2k+5)}$

10) $\dfrac{(7b+9)(3b-10)}{56} \div \dfrac{(7b+9)(3b-10)}{2}$

11) $\dfrac{10p^2(p-4)}{10} \cdot \dfrac{8}{16(p-4)}$

12) $\dfrac{p+5}{10(5p+2)} \cdot \dfrac{(5p-2)(5p+2)}{5p-2}$

13) $\dfrac{5}{35m+49} \div \dfrac{4}{20m+28}$

14) $\dfrac{n+4}{3n^2+7n-20}(3n-5)$

15) $\dfrac{15v^2+6v}{2v-9} \cdot \dfrac{2v-9}{5v+2}$

16) $(v-9) \div \dfrac{5-24v-5v^2}{5v-1}$

17) $\dfrac{40+9x-10x^2}{5x^2+18x+16} \div \dfrac{6x^2-17x+5}{9x^2-3x}$

18) $\dfrac{12n+48}{2n^2+28n+80} \cdot \dfrac{-10n^2+28n-16}{10n^2-28n+16}$

19) $\dfrac{r-9}{7r^2-52r+21} \div \dfrac{30r^2+54r}{35r^2+48r-27}$

20) $(9x^3-24x^2) \cdot \dfrac{8x-36}{6x^2-43x+72}$

21) $\dfrac{63n^2-27n}{5n-7} \cdot \dfrac{10n-14}{49n^2-21n}$

22) $\dfrac{18k^2-81k}{27k-72} \cdot \dfrac{27k-72}{14k^2-63k}$