Math 8 Name_____ ID: 1

21-Properties of Exponents

Date_____ Period____

Write each expression in simplest form. All numbers should be evaluated and all variables should have positive exponents.

1) $\dfrac{\left(3v^{-2}\right)^{0}}{\left(v^{3}\right)^{-1} \cdot \left(5v^{3}\right)^{2}}$

2) $\dfrac{2p^{0}}{\left(p^{-1}\right)^{-3} \cdot 5p^{3}}$

3) $\dfrac{3m \cdot 5m^{3}}{\left(5m^{2}\right)^{0}}$

4) $\dfrac{6r \cdot 5r^{3}}{\left(2r^{0} \cdot 4r^{-2}\right)^{0}}$

5) $\dfrac{\left(4k^{-2}\right)^{3}}{6k^{2} \cdot k^{2}}$

6) $\dfrac{p^{3} \cdot 6p^{3}}{\left(6p^{2}\right)^{-3}}$

7) $\dfrac{m}{\left(m^{3} \cdot 2m\right)^{2}}$

8) $\dfrac{4n^{3} \cdot 3n^{-3}}{\left(n^{2}\right)^{2}}$

9) $\dfrac{\left(5p^{-2}\right)^{0} \cdot 2p^{-1}}{3p^{-3}}$

10) $\dfrac{\left(2k^{2}\right)^{3}}{6k^{-2} \cdot 6k}$

11) $\dfrac{\left(3v\right)^{0}}{5v^{2} \cdot 2v^{0}}$

12) $\dfrac{\left(4m^{2}\right)^{3}}{4m^{2} \cdot 6m}$

13) $\dfrac{\left(2n^{3}\right)^{3}}{5n \cdot n}$

14) $\dfrac{4a^{2} \cdot \left(a^{-2}\right)^{-1}}{5a^{0}}$

15) $\dfrac{\left(6x^{3}\right)^{2}}{3x^{3} \cdot 4x^{0}}$