Simplify each. Make sure your answers have no exponents that are negative or zero.

1. $(4P^5Q^{-3}R^2)^{-2}(2P^{-2}Q^6R^{-4})^3(P^{-3}Q^{-1}R)^{-4}$

2. $(6C^5D^{-3})^2\left(\dfrac{C^{-2}D^4}{3C^5D^{-1}}\right)^3$

3. $\left(\dfrac{w^3x^{-4}}{w^{-2}y^{-3}}\right)^{-1}\left(\dfrac{w^{-3}y^5}{x^{-5}w^7}\right)^{-3}$