1. $\dfrac{14z^{-4}z^1}{z^{-4}z^{-1}} = \dfrac{14z^{-4+1}}{z^{-4-1}} = \dfrac{14z^{-3}}{z^{-5}} = 14z^{-3-(-5)} = 14z^2$

2. $\dfrac{10x^0x^{-5}}{x^{-1}x^5} = \dfrac{10x^{0-5}}{x^{-1+5}} = \dfrac{10x^{-5}}{x^4} = 10x^{-5-4} = 10x^{-9}$

3. $\dfrac{3x^0x^{-4}}{x^3x^{-4}} = \dfrac{3x^{0-4}}{x^{3-4}} = \dfrac{3x^{-4}}{x^{-1}} = 3x^{-4-(-1)} = 3x^{-3}$

4. $\dfrac{9z^2z^{-4}}{z^{-5}z^0} = \dfrac{9z^{2-4}}{z^{-5+0}} = \dfrac{9z^{-2}}{z^{-5}} = 9z^{-2-(-5)} = 9z^3$

5. $\dfrac{-9y^{-4}y^4}{y^1y^{-3}} = \dfrac{-9y^{-4+4}}{y^{1-3}} = \dfrac{-9y^0}{y^{-2}} = -9y^{0-(-2)} = -9y^2$