Ex 1. Simplify $\sqrt[3]{9a^6b^{12}}$

Ex 2. Simplify $(x^3y^6z)(x^2yz^3)$

Ex 3. Expand $(3x^2 + 2y)(7x^2 + 3y)$

Ex 4. Solve for x in $x = \frac{42}{x-1}$.

Ex 5. Knowing that $a^2 = b^3$, rewrite a^5 as a power of b.

Ex 6. What is the domain of the function $f(x) = \frac{\sqrt{5x+1}}{(x-2)(x+3)}$?