

$15x^3y^5z^4(5yz^2 - 3xy^2 + 2xz^2) = 75x^3y^6z^6 - 45x^4y^7z^4 + 75x^3y^4z^2 - 45x^2y^3z^4 + 30x^2y^5$ so the factorization in
 $30x^4y^5z^6 \neq$
item B is not correct.