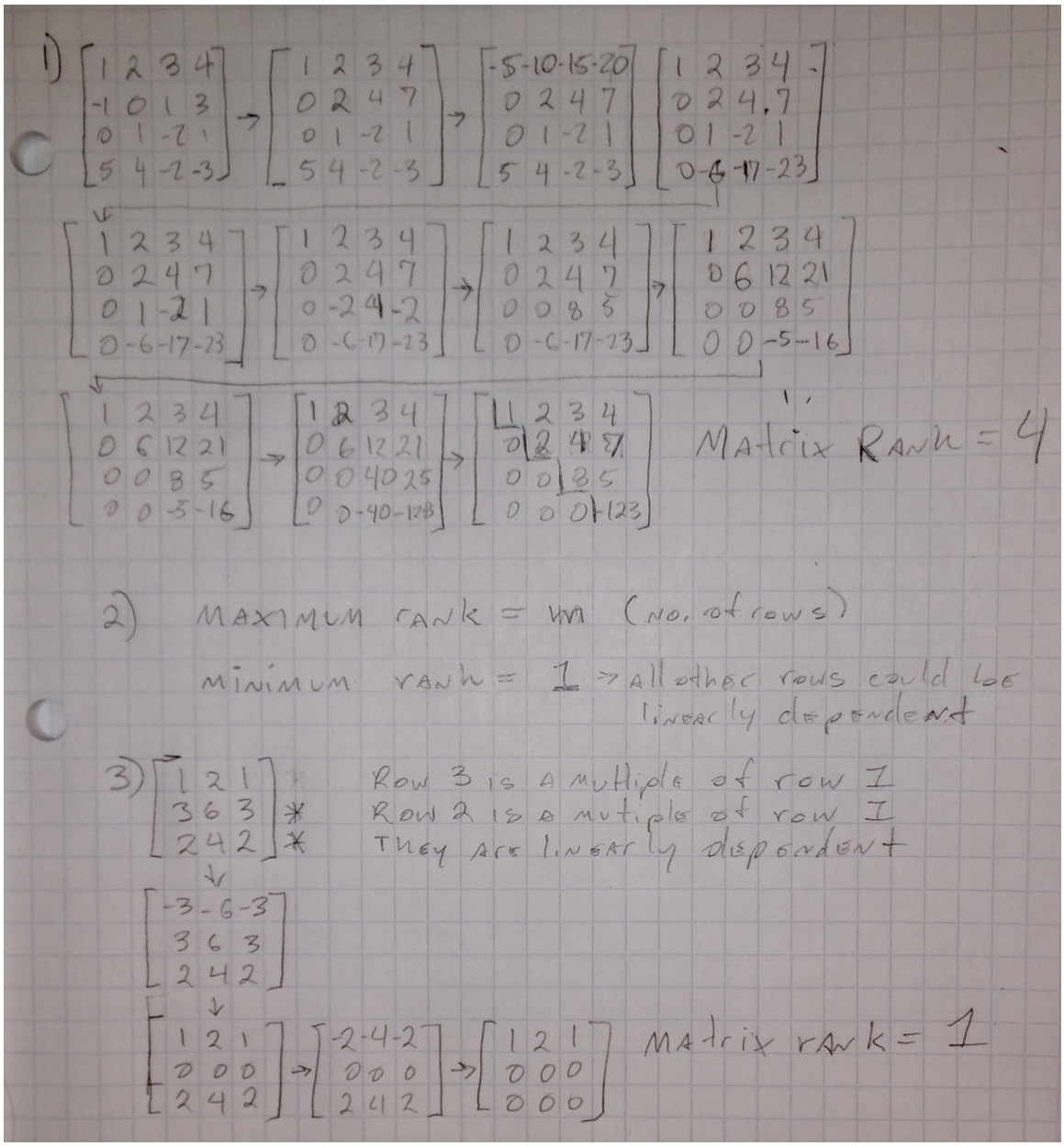
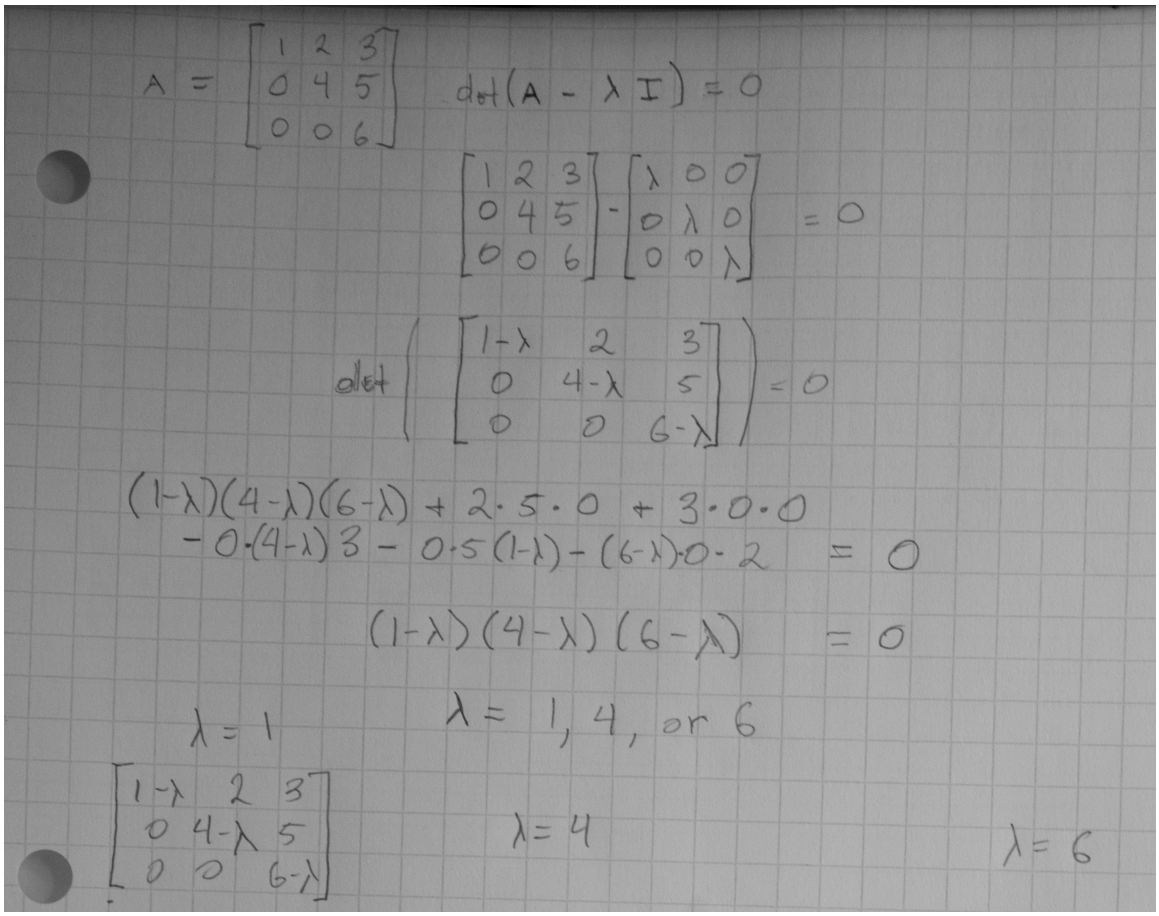
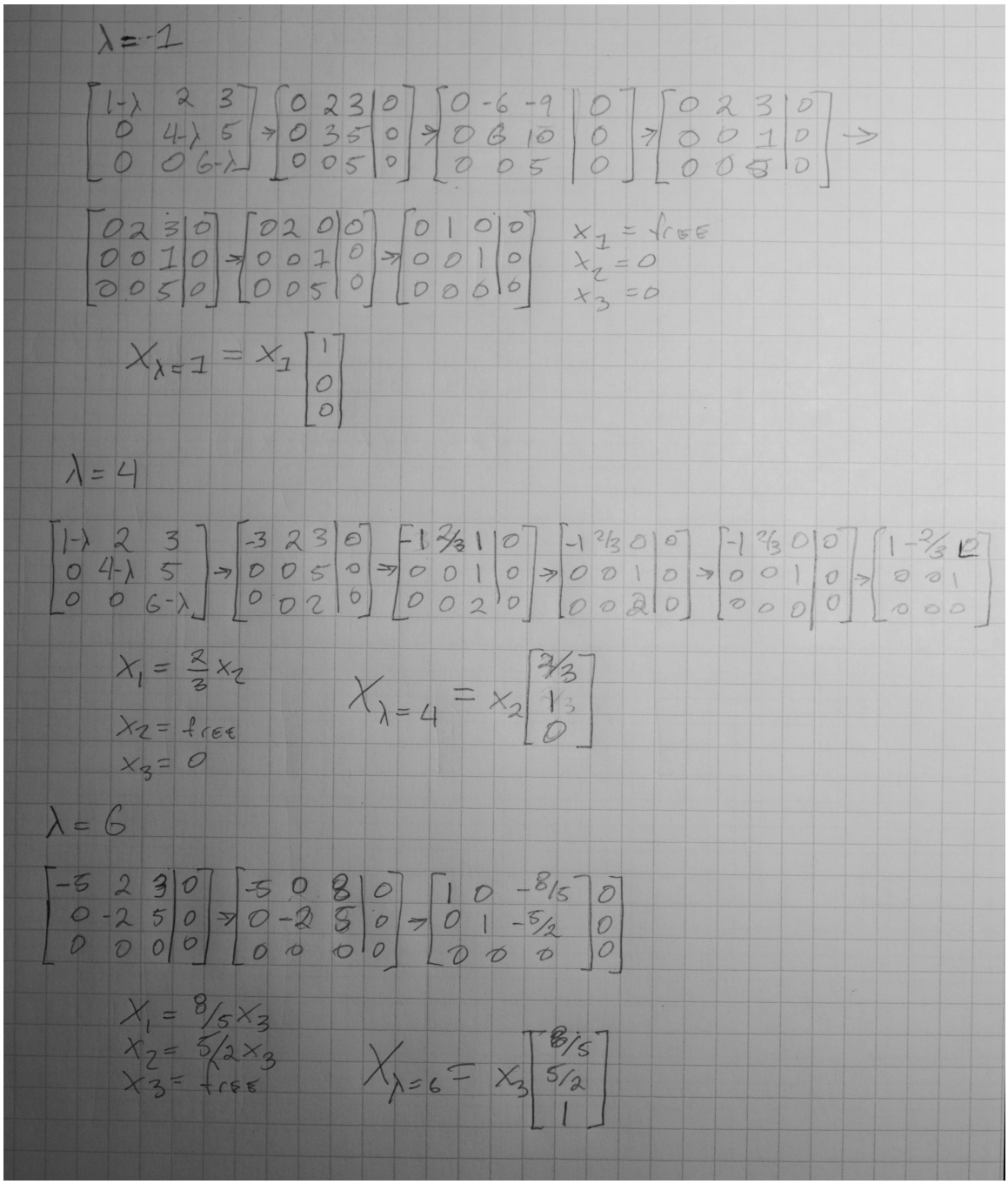

1)
MATRIX RANK = 4
2)
MAXIMUM RANK = m (NO. of rows)
MINIMUM RANK = 1 → ALL other rows could be LINEARLY DEPENDENT
3)
ROW 3 IS A MULTIPLE of ROW 1
ROW 2 IS A MULTIPLE of ROW 1
THEY ARE LINEARLY DEPENDENT
MATRIX RANK = 1


A = [1 2 3; 0 4 5; 0 0 6]
det(A - λI) = 0
[1 2 3; 0 4 5; 0 0 6] - [λ 0 0; 0 λ 0; 0 0 λ] = 0
det([1-λ 2 3; 0 4-λ 5; 0 0 6-λ]) = 0
(1-λ)(4-λ)(6-λ) + 2·5·0 + 3·0·0
- 0·(4-λ)3 - 0·5(1-λ) - (6-λ)·0·2 = 0
(1-λ)(4-λ)(6-λ) = 0
λ = 1, 4, or 6
λ = 1
[1-λ 2 3; 0 4-λ 5; 0 0 6-λ]
λ = 4
λ = 6


λ = 1
λ = 4
λ = 6