LINEAR ALGEBRA II – 練習題 I

(1) Let V_1 and V_2 be subsapces of a vector space V. Show that there is an isomorphism
$$\phi : \frac{V_1}{V_1 \cap V_2} \to \frac{V_1 + V_2}{V_2} \ .$$
(Hint: construct a linear transformation from V_1 to $(V_1 + V_2)/V_2$.)

(2) [FIS] Section 2.6: 9, 11, 12, 19, 20.