

Problem 1

FFTF TT TTTT TTTT TTTT

$$(1, 2, 3, 4)$$

$$(5, 6, 7, 8)$$

$$(1, 5) \subseteq \binom{A}{2} \cup \binom{B}{2}$$

Problem 2

$$(a, b, c) = \{\{a\}, \{a, b\}, \{a, b, c\}\}$$

$$(d, e, f) = \{\{d\}, \{d, e\}, \{d, e, f\}\}$$

Problem 3

$$(a, b) = \{\{\{a\}, \emptyset\}, \{\{b\}\}\}$$

$$(c, d) = \{\{\{c\}, \emptyset\}, \{\{d\}\}\}$$

$$\{\{a\}, \emptyset\} = \{\{c\}, \emptyset\}, \{\{b\}\} = \{\{d\}\} \text{ or}$$

$$\{\{a\}, \emptyset\} = \{\{d\}\}, \{\{c\}, \emptyset\} = \{\{b\}\}$$

$$(a, b) = (c, d)$$

Problem 4

$$A \times B = A \times C$$