① $A = \{1\}$

$P(A) = 2^1 = 2$

$\{\{1\}, \emptyset\}$

$P(P(A))$

$= \{\{\{1\}\}, \{\emptyset\}, \{\{1\}, \emptyset\}\}$

② (a) $R^2 \subseteq R^3$

(b) $x(x^2-1)$ | x^2-1

$x = -1, 0, 1$ | $x = -1, 1$

(d) $N \subseteq P(N)$

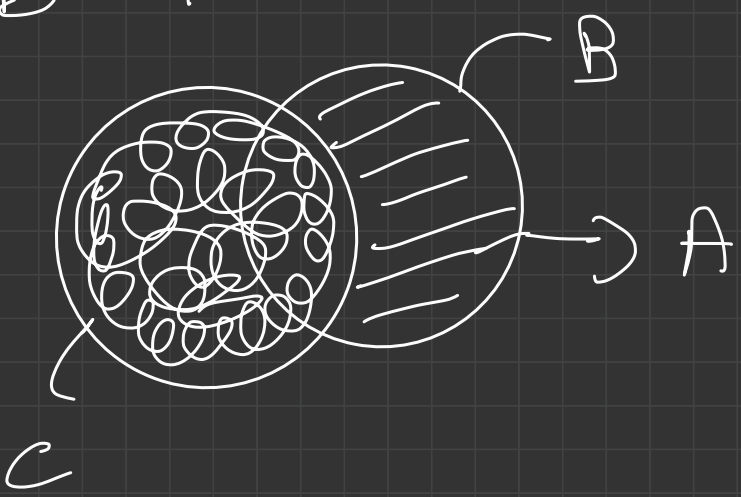
$N = \{1, 2, 3, 4\}$

$P(N) = \{\{1\}, \{2\}, \ldots\}$

(e) $A = B - C$

$x \in A = x \in B \wedge x \notin C$

$B = A \cup C$



$\in$

$\in$

$\notin$

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F

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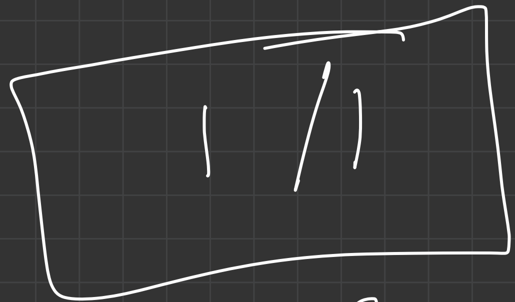
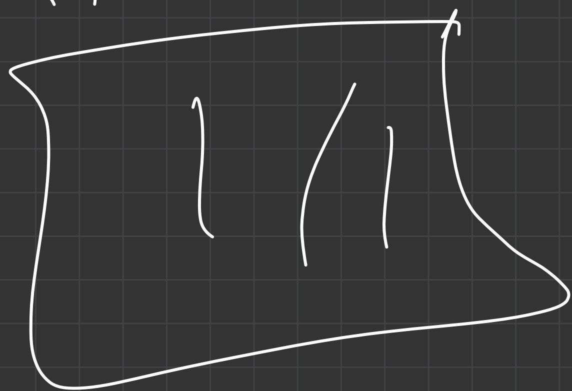


$\{1, 4, 9, 16 \ldots\}$

$\{1, 8, 27 \ldots\}$



$\{0,1\}$

$\{-1,1\}$

$P(A) = \{\{1\}, \phi\}$

$P(P(A)) = \{\{\{1\}\}, \{\phi\}, \{\{1\}, \phi\}, \phi\}$

10

$\frac{5}{20}$ $\frac{1}{4}$ 0.25

0.8 $\times$ 0.25