

## CHAPTER 1



Let  $A = \{1, 2, 3, 4, 5\}$  and  $B = \{2, 3, 4\}$ . Then  $B \subseteq A$ .

Let  $A = \{1, 2, 3, 4, 5\}$  and  $B = \{6, 7, 8\}$ . Then  $B \not\subseteq A$ .

Let  $A = \{1, 2, 3, 4, 5\}$  and  $B = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$ . Then  $A \subseteq B$ .

Let  $A = \{1, 2, 3, 4, 5\}$  and  $B = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20\}$ . Then  $A \subseteq B$ .

Let  $A = \{1, 2, 3, 4, 5\}$  and  $B = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30\}$ . Then  $A \subseteq B$ .

Let  $A = \{1, 2, 3, 4, 5\}$  and  $B = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50\}$ . Then  $A \subseteq B$ .

Date	Description
2023-01-01	Initial deposit of \$10,000
2023-01-15	Withdrawal of \$500 for office supplies
2023-01-31	Interest earned on bank account
2023-02-10	Deposit of \$2,000 from client
2023-02-20	Withdrawal of \$1,000 for rent
2023-02-28	Interest earned on bank account
2023-03-05	Deposit of \$3,000 from client
2023-03-15	Withdrawal of \$800 for utilities
2023-03-31	Interest earned on bank account
2023-04-01	Total balance: \$12,400

Date	Description
2023-04-15	Deposit of \$1,500 from client
2023-04-25	Withdrawal of \$600 for office rent
2023-05-05	Deposit of \$2,500 from client
2023-05-15	Withdrawal of \$900 for utilities
2023-05-31	Interest earned on bank account
2023-06-01	Total balance: \$14,000

Total amount deposited: \$20,000  
 Total amount withdrawn: \$4,800  
 Total interest earned: \$1,200  
 Final balance: \$16,400