# Sets and Numbers – Answers

**Problem 1**

(a) $3, 4, 5, 6, 7, 8, 9$

(b) $0, 1, 2, 3, 4, 5$

(c) $0, 1/2, 1, 3/2, 2, 5/2$

(d) $1, 3, 5, 7$

(e) $-1, 0, 1$

(f) $0, 1, 2, 3$

(g) $-3, -2, -1, 0, 1, 2, 3$

(h) $-5, -4, -3, -2, 2, 3, 4, 5$

(i) $0, 1, 2, 3, 4, 5, 6, 7, 8$

(j) $0, 1, 2$

(k) $-2, -1, 0, 1, 2$

(l) $-1, 0, 1$

(m) $\emptyset, \{1\}, \{2\}, \{3\}, \{1, 2\}, \{2, 3\}, \{1, 3\}, \{1, 2, 3\}$

**Problem 2** Determine if either of the sets $A$ and $B$ is a subset of the other.

(a) $A \subseteq B$

(b) Neither is a subset of the other.

(c) $B \subseteq A$

(d) $B \subseteq A$

(e) $A \subseteq B$

(f) $A \subseteq B$ and $B \subseteq A$, i.e., $A = B$.

**Problem 3** Write the following subsets of $\mathbb{R}$ as an interval.

(a) $[-2, 2]$

(b) $[2, 14]$

(c) $[-10, 10]$

(d) $[4, 5]$

(e) $(-1, 3)$

(f) $[5, 9]$