

## HOME WORK 1

QI WANG

**Exercise 1** (# 2)

$$\{\dots, -4, -1, 2, 5, 8, \dots\}$$

**Exercise 2** (# 8)

$$\{0, -2, -3\}$$

**Exercise 3** (# 18)

$$\{ x^2 : x = 2n \text{ where } n \in \mathbb{Z}_{\geq 0} \}$$

**Exercise 4** (# 30)

$$5.$$

**Exercise 5** (# 38)

$$\begin{aligned} 5x &\leq 20 \\ x &\leq 4 \\ x &= 1, 2, 3, 4 \\ \{1, 2, 3, 4\} \\ \text{cardinality} &= 4 \end{aligned}$$

**Exercise 6 (# 40)**