

Quiz 7

$$1 \text{ (a) } A = \{x \in \mathbb{N} : x \leq 27 \text{ and } 5 \mid x\} = \\ \{0, 5, 10, 15, 20, 25\}$$

$$\text{(b) } B = \{x \in \mathbb{Z} : x^2 < 7 \text{ and } x \neq 0\} \\ = \{-2, -1, 1, 2\}$$

$$2. \quad C = \{x \in \mathbb{Z} : |x| \leq 8\} =$$

$$\text{(a) } \{-8, -7, -6, \dots, 0, 1, \dots, 8\}$$

$$|C| = 17$$

$$\text{(b) } |A| = 6$$

$$\text{(c) } |P(A)| = 2^6 = 64$$