
January 23, 2019

Score _____

- Turn over.*

5. (5 points) In this problem, the universal set is the set of natural numbers, \mathbb{N} . Also, let $A = \{x|x \in \mathbb{N} \text{ and } -3 < x < 4\}$, $B = \{x|x \in \mathbb{N} \text{ and } x > 7\}$, and $C = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$.

(a) Write A in roster notation.

(b) Determine B' .

(c) Determine $A \cup C$.

(d) Determine $B \cap C$.

(e) Determine $A \cap \emptyset$.