

Mathematics Form 4 : Operations on Sets

Name :

1. Find the union of sets for each of the following.

a) $A = \{2, 4, 6, 8, 12\}$ $B = \{4, 8, 10, 12\}$ $C = \{1, 3, 4, 8\}$ $A \cup B =$ $B \cup C =$ $A \cup C =$ $A \cup B \cup C =$	b) $P = \{a, b, g, i, s, t, y\}$ $Q = \{b, d, r, t, z\}$ $R = \{a, e, s, t\}$ $P \cup Q =$ $Q \cup R =$ $P \cup R =$ $P \cup Q \cup R =$
c) $\xi = \{x: 1 \leq x \leq 10, x \text{ is an integer}\}$ $M = \{x: x \text{ is a multiple of } 3\}$ $N = \{x: x \text{ is an even number}\}$ $\xi =$ $M =$ $N =$ $M \cup N =$ $n(M \cup N) =$ $(M \cup N)' =$ $n(M \cup N)' =$	d) $\xi = \{x: 10 \leq x \leq 20, x \text{ is an integer}\}$ $S = \{x: x \text{ is divisible by } 3\}$ $T = \{x: x \text{ is an odd number}\}$ $\xi =$ $S =$ $T =$ $S \cup T =$ $n(S \cup T) =$ $(S \cup T)' =$ $n(S \cup T)' =$