

Mathematics Form 4 : Operations on Sets

Name :

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

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