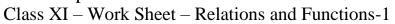


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1	The range of the (a) {2, 3, 5, 7} (c) {2, 3, 5, 7, 11		(a) : x is a prime (b) {2, 3, 5, (d) {4, 9, 25}		15} is	
2	If the ordered pa (a) (2, -2)		(c) (c) (c)	l, then the value ((<i>d</i>) {2, 3}	of a and b are	
3	If there are 1024 rel (a) 3	ations from set A=	{ 1, 2, 3, 4, 5} to a se (c)		of elements of B is: (d) 8	
4	For two sets A and B, given $n(A \times B) = 6$ and three of the elements of $A \times B$ are $(2, 5)$, $(4, 6)$, $(8, 6)$. Then the remaining elements are $(a) (2, 6), (4, 5), (8, 5)$ $(b) (2, 4), (4, 8), (5, 6)$ $(c) (2, 6), (4, 5), (4, 8)$ $(d) (2, 4), (4, 5), (6, 8)$					
5			defined by $f(x) = (c)[-1, 1]$			
6	If A and B are two sets having m and n elements, respectively and having p elements common. The number of possible relations which can be defined from A to B is (a) 2^{m+n} (b) 2^{m+n-p} (c) 2^{mn} (d) 2^{mn-p}					
7	The domain of f (a) R	$f(x) = \sqrt{25 - x^2}$ is $f(x) = \sqrt{b} (-5, 5)$	(c) [-5, 5]	(d) $(-\infty, 5)$		
8	If $n(A \cap B) = 5$, to (a) 5	then $n((A \times B) \cap (b) \ 20$	(B × A)) is equal t (c) 25	o. (d) 16		
9	The range of the $(a) \left[-\frac{1}{2}, \frac{1}{2} \right]$		$\frac{x}{1+x^2}$ is $(c)\left(-\frac{1}{2},\frac{1}{4}\right)$	$(d)\left(0,\frac{1}{2}\right)$		
	_			-		

10	The range of the function $f(x) = x - [x]$ where $[x]$ is the greatest integer less than or equal to x is							
	(a) [0, 1)	(<i>b</i>) [0, 1]	(c) (0, 1)	(d)(0, 1]				
11	The set B is the range of a constant function. Then, $n(B)$ equals							
	(a) 0	(b) 1	(c) 2	(d) 3				
12	Find the domain and range of the relation R, where $R = \{(x+1,x+5)\}, x \in \{0,1,2,3,4,5\}$ is $(a) D = \{0,1,2,3,4,5\}, R = \{0,1,2,3,4,5\}$ $(b) D = \{0,1,2,3,4,5\}, R = \{5,6,7,8,9,10\}$ $(c) D = \{1,2,3,4,5,6\}, R = \{0,1,2,3,4,5\}$ $(d) D = \{1,2,3,4,5,6\}, R = \{5,6,7,8,9,10\}$							
13	A and B are two sets having 4 and 6 elements respectively and having 3 elements is common. The number of relations that can be defined from A to B							
	$(a) 2^{21}$	$(b) 2^{24} - 1$	$(c) 2^{24} - 3$	$(d) \ 2^6$	$(e) \ 2^{24}$			
14	There are 4096 relations from a set A to a set B. If the set A has 6 elements, then t number of elements in the set B is:							
	(a) 32	(b) 2	(c) 128	(d) 1024				
15	The range of the function $f(x) = \frac{3x+5}{4x-7}$ is:							
	(a) R	$(b) \; \mathbf{R} - \{7\}$	$(c)\;\mathbf{R}-\left\{\frac{1}{4}\right\}$	$(d) \ \mathbf{R} - \left\{ \frac{3}{4} \right\}$				

• The answer will be discussed during the math lesson.
