Class 11 Maths Chapter 2 Relations & Functions MCQs For Practice

1. Given a relation R = {(3, 6), (4, 7), (5, 8), (9, 6)}, check whether is it a function?
(a) Yes
(b) No
(c) Cannot say
(d) Insufficient data

2. Given a function f(x) = 1/(1 + 2 sinx), find the range of the f(x)
(a) [⅓, 1)
(b) (−1, ⅓)
(c) [−1, ⅓]
(d) (0, ⅓]

3. Given f(x) = 2[x] where [x] is the greatest integer function, the domain and range of the function is:
(a) Domain = **R** and range = set of all positive integers
(b) Domain = **R** and range = set of Integers
(c) Domain = **R** − {0} and range = set of all even numbers
(d) Domain = **R** and range = set of all even Integers

4. If f(x) = 2x + 7 and g(x) = x³ + 1, then find the value of (fog)⁻¹
(a) [(x − 9)/2]$^{1/3}$
(b) [(x + 9)/3]$^{1/3}$
(c) [(x+9)/2]$^{1/4}$
(d) [(x − 9)/3]$^{1/3}$

5. If A = { 1, 3, 4, 5, 9, 10} and R is a relation on A defined by R = {(a, b) | a divides b}. How many ordered pairs are in R?
(a) 8
(b) 7
(c) 9
(d) It will be an empty set

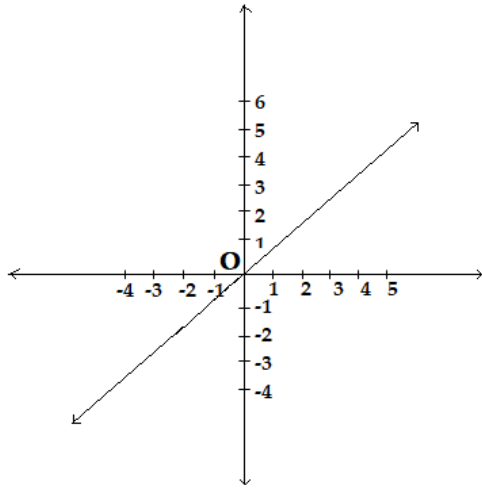**6. If f(x) = (3x − 2)/ (x − 5) then the domain and range of f(x) will be**
(a) Domain = **R** and Range = **R** − {5}
(b) Domain = **R**− {5} and Range = **R** − {3}
(c) Domain = **R** and Range = **R** − {3}
(d) Domain = **R** and Range = **R**

7. If f(x) = x/|x|; |x| is modulus function and x∈R −{0} then range of the function will
(a) be a null set
(b) be R itself
(c) contain only two elements
(d) contain infinite elements

8. Which of the following functions represents the given graph?

(a) Modulus Function
(b) Identity Function
(c) Constant Function
(d) None of the above

9. An onto-function has
(a) codomain equal to its range
(b) codomain not equal to its range
(c) always one-one function
(d) None of the above

10. Function f defined by $f(x) = 1/\sqrt{(x - |x|)}$, has domain
(a) R
(b) R−{0}
(c) R^+
(d) None of the above

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| Q.1 - (a) | Q.2 - (c) | Q.3 - (d) | Q.4 - (a) | Q.5 - (a) |
| Q.6 - (b) | Q.7 - (c) | Q.8 - (b) | Q.9 - (a) | Q.10 - (d) |