
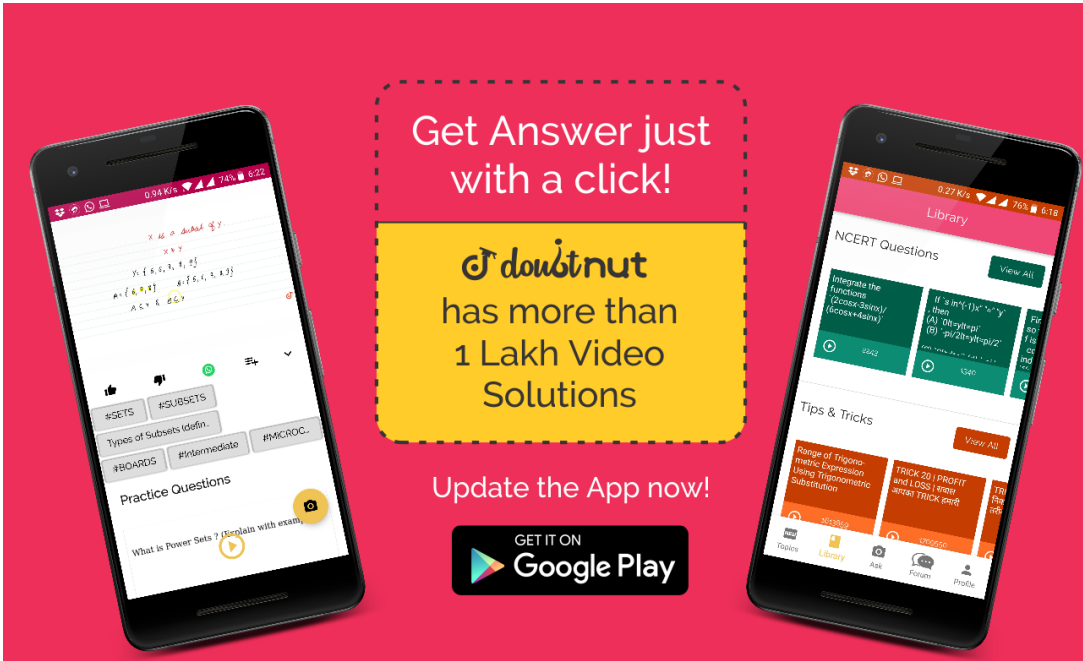


Ques No.	Question
1 - 10540	<p>CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS</p> <p>Let \mathcal{T} be the set of all triangles in a plane with R as relation in \mathcal{T} given by $R = \{(T_1, (\setminus T)_2) : (\setminus T)_1 \cong T_2\}$. Show that R is an equivalence relation.</p> <p>Click to watch Free Video Solution of this question on Doubtnut</p>
2 - 10547	<p>CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS</p> <p>If $f(x)$ is an invertible function, find the inverse of $f(x) = \frac{3x - 2}{5}$</p> <p>Click to watch Free Video Solution of this question on Doubtnut</p>
3 - 10583	<p>CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS</p> <p>If $f(x) = x + 7$ and $g(x) = x - 7$, $x \in R$, find $(f \circ g)(7)$</p> <p>Click to watch Free Video Solution of this question on Doubtnut</p>
 <p>पढ़ना हुआ आसान</p>	
4 - 10601	CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

If $f : R \div R$ be defined by $f(x) = (3 - x^3)^{1/3}$, then find $f \circ f(x)$

[Click to watch Free Video Solution of this question on Doubtnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

5 - 10613

Prove that the relation R on the set $A = \{1, 2, 3, 4, 5\}$ given by $R = \{(a, b) : |a - b| \text{ is even}\}$, is an equivalence relation.

[Click to watch Free Video Solution of this question on Doubtnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

6 - 10644

Let $A = R - \{3\}$ and $B = R - [1]$. Consider the function $f: A \xrightarrow{B}$ defined by $f(x) = \left(\frac{x - 2}{x - 3} \right)$. Show that f is one-one and onto and hence find f^{-1}

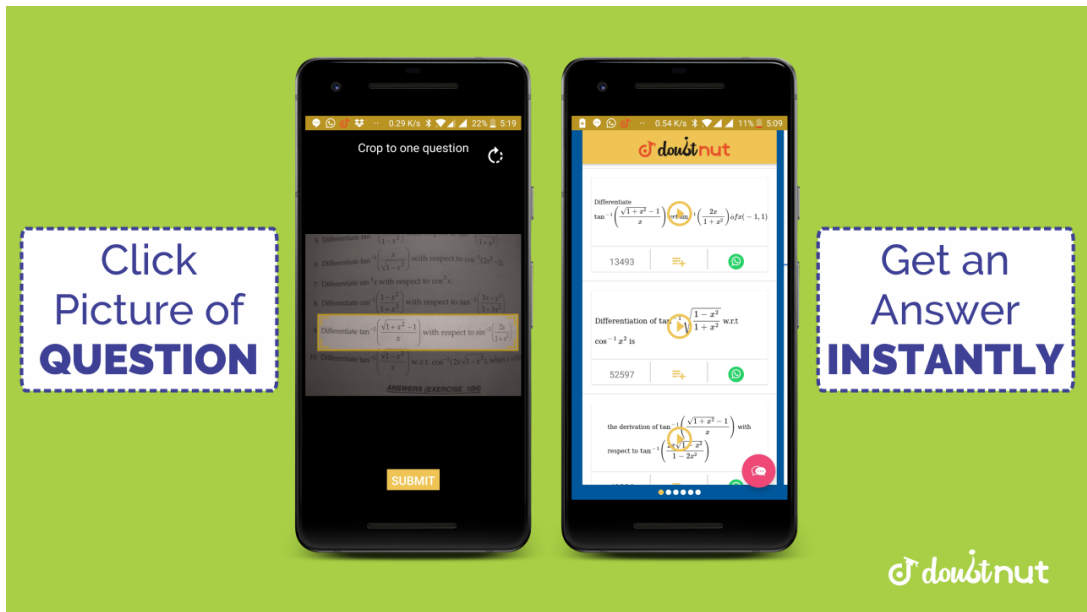
[Click to watch Free Video Solution of this question on Doubtnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

7 - 10716

Let $*$ be a binary operation of N given by $a \cdot b = LCM(a, b)$ for all $a, b \in N$. Find $5 \cdot 7$.

[Click to watch Free Video Solution of this question on Doubtnut](#)



CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

8 - 10730

Let* be a binary operation on N given by $a*b = \text{HCF}(a, b)$, $a, b \in N$. Write the value of $22*4$.

[Click to watch Free Video Solution of this question on Doubnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

9 - 10746

Show that the relation R in the set of real numbers, defined as $R = \{(a, b) : a \leq b^2\}$ is neither reflexive, nor symmetric, nor transitive.

[Click to watch Free Video Solution of this question on Doubnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

10 - 10748

Show that the relation S in the set $A = \{x \in Z : 0 \leq x \leq 12\}$ given by $S = \{(a, b) : a, b \in Z, |a - b| \text{ is divisible by } 4\}$ is an equivalence relation. Find the set of all elements related to 1.

[Click to watch Free Video Solution of this question on Doubnut](#)

11 - 10765

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

Show that $f : \mathbb{N} \rightarrow \mathbb{N}$, given by

$$f(x) = \begin{cases} x + 1, & \text{if } x \text{ is odd} \\ x - 1, & \text{if } x \text{ is even} \end{cases}$$

is both one-one and onto.

[Click to watch Free Video Solution of this question on Doubtnut](#)



CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

12 - 10770

What is the range of the function $f(x) = \frac{|x - 1|}{(x - 1)}$?

[Click to watch Free Video Solution of this question on Doubtnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

13 - 10796

Find the intervals in which the function f given by

$$f(x) = x^3 + \frac{1}{x^3}, \quad x \neq 0 \text{ is (i) increasing (ii) decreasing.}$$

[Click to watch Free Video Solution of this question on Doubtnut](#)

14 - 10803

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

Consider $f : \mathbb{R}_+ \rightarrow \mathbb{R}_+$ given by $f(x) = x^2 + 4$. Show that f is invertible with the inverse f^{-1} of f given by

$f^{-1}(y) = \sqrt{y - 4}$, where R_+ is the set of all non-negative real numbers.

[Click to watch Free Video Solution of this question on Doubtnut](#)

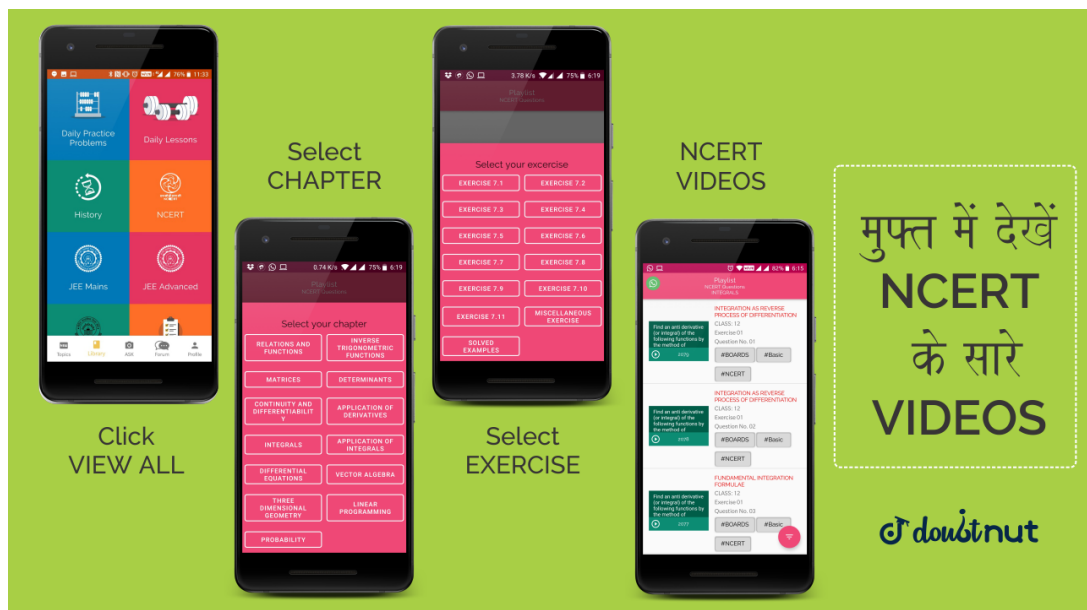
CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

15 - 10813

State the reason for the relation R in the set {1, 2, 3} given by R= {(1, 2), (2, 1)} not to be transitive.

[Click to watch Free Video Solution of this question on Doubtnut](#)

 पढ़ना हुआ आसान



CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

16 - 10838

If the binary operation $*$ on the set of integers Z , is defined by $a \cdot b = a + 3b^2$, then find the value of $2 \cdot 4$

[Click to watch Free Video Solution of this question on Doubtnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

17 - 10853

If $f: R \rightarrow R$ is defined by $f(x) = 3x + 2$, define $f[f(x)]$.

[Click to watch Free Video Solution of this question on Doubtnut](#)

18 - 10864

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

What is the domain of the function $\sin^{-1} x$?

[Click to watch Free Video Solution of this question on Doubtnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

19 - 10865

If ' f ' is an invertible function, defined as $f(x) = \frac{3x - 4}{5}$, write $f^{-1}(x)$

[Click to watch Free Video Solution of this question on Doubtnut](#)

 **doubt nut**
पढ़ना हुआ आसान



FREE VIDEOS OF PREVIOUS YEAR EXAM PAPERS

JEE ADVANCED | JEE MAINS
12 BOARD | 10 BOARDS

Made by  सिर्फ आपके लिए

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

20 - 10897

Let $f: N \rightarrow N$ be defined by

$$f(n) = \left\{ \begin{array}{l} \frac{n+1}{2}, \text{ if } n \text{ is odd} \\ \frac{n}{2}, \text{ if } n \text{ is even} \end{array} \right. \text{ for all } n \in N$$

Find whether the function f is bijective.

[Click to watch Free Video Solution of this question on Doubtnut](#)

21 - 10918

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

If $f(x) = \frac{4x + 3}{6x - 4}$, $x \neq \frac{2}{3}$, show that $f \circ f(x) = x$ for all $x \neq \frac{2}{3}$. What is the inverse of f ?

[Click to watch Free Video Solution of this question on Doubtnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

22 - 10936

Let $A = N \times N$ and $*$ be a binary operation on A defined by $(a, b) \cdot (c, d) = (a + c, b + d)$. Show that $*$ is commutative and associative. Also, find the identity element for $*$ on A , if any.

[Click to watch Free Video Solution of this question on Doubtnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

23 - 10937

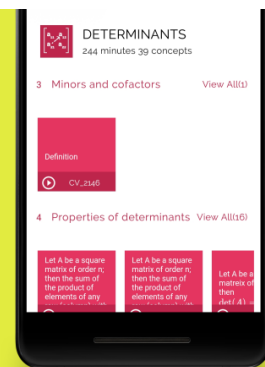
Consider $f: R \rightarrow [-5, \infty)$ given by $f(x) = 9x^2 + 6x - 5$. Show that f is invertible with $f^{-1}(y) = \left(\frac{\sqrt{y+6} - 1}{3} \right)$.

[Click to watch Free Video Solution of this question on Doubtnut](#)

 **doubt**nut
पढ़ना हुआ आसान

मुफ्त में सीखें
सारे टॉपिक

Learn All
Topics
For FREE



 **doubt**nut

24 - 10950

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

Consider the binary operation* on the set $\{1, 2, 3, 4, 5\}$ defined by $a * b = \min. \{a, b\}$. Write the operation table of the operation *.

[Click to watch Free Video Solution of this question on Doubtnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

A binary operation * on the set $\{0,1,2,3,4,5\}$ is defined as:

$$a \cdot b = \begin{cases} a + b & \text{if } a + b < 6 \\ a + b - 6 & \text{if } a + b \geq 6 \end{cases}$$

25 - 10984

Show that zero is the identity for this operation and each element a of the set is invertible with $6a$, being the inverse of a .

[Click to watch Free Video Solution of this question on Doubtnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

Let $f: R \rightarrow R$ be defined as $f(x) = 10x + 7$. Find the function $g: R \rightarrow R$ such that $gof = fog = I_R$.

26 - 10985

[Click to watch Free Video Solution of this question on Doubtnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

Consider $f: R_+ \rightarrow [4, \infty]$ given by $f(x) = x^2 + 4$. Show that f is invertible with the inverse (f^{-1}) of f given by

27 - 11003

$f^{-1}(y) = \sqrt{y - 4}$, where R_+ is the set of all non-negative real numbers.

[Click to watch Free Video Solution of this question on Doubtnut](#)



CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

28 - 11011

Let $A = \{1, 2, 3\}$, $B = \{4, 5, 6, 7\}$ and let

$f = \{(1, 4), (2, 5), (3, 6)\}$ be a function from A to B . State whether f is one-one or not.

[Click to watch Free Video Solution of this question on Doubtnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

29 - 11026

Show that the function f in $A = \mathbb{R} - \left\{ \frac{2}{3} \right\}$ defined as $f(x) = \frac{4x + 3}{6x - 4}$ is one-one and onto. Hence find f^{-1} .

[Click to watch Free Video Solution of this question on Doubtnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

30 - 11042

If the binary operation $*$ on the set Z of integers is defined by $a \cdot b = a + b - 5$, then write the identity element for the operation $*$ in Z .

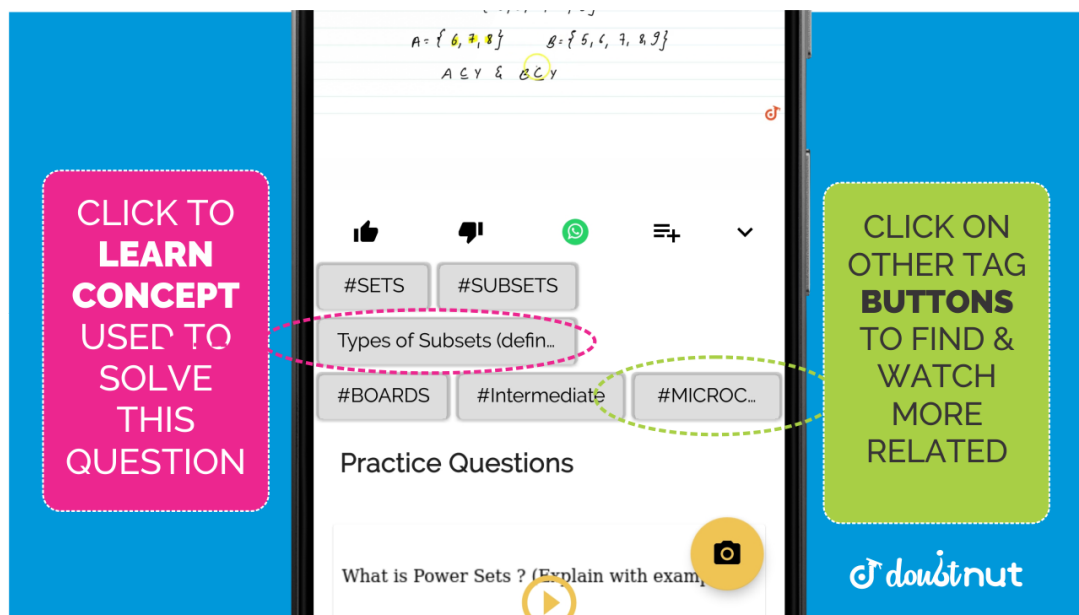
[Click to watch Free Video Solution of this question on Doubtnut](#)

31 - 11048

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

Prove that the relation R in the set $A = \{5, 6, 7, 8, 9\}$ given by $R = \{(a, b) : |a - b|, \text{ is divisible by } 2\}$, is an equivalence relation. Find all elements related to the element 6.

[Click to watch Free Video Solution of this question on Doubtnut](#)



CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

Consider the binary operations $*$: $R \times R \rightarrow R$ and o : $R \times R \rightarrow R$ defined as $a \cdot b = |a - b|$ and $aob = a$ for all $a, b \in R$.

32 - 11073

Show that $*$ is commutative but not associative, ' o ' is associative but not commutative.

[Click to watch Free Video Solution of this question on Doubtnut](#)

33 - 11078

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

If the binary operation $*$, defined on Q , is defined as

$a \cdot b = 2a + b - ab$, for all $a * b \in Q$, find the value of $3 * 4$

[Click to watch Free Video Solution of this question on Doubnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

34 - 11089

Let Z be the set of all integers and R be the relation on Z defined as $R = \{(a, b); a, b \in Z, \text{ and } (a - b) \text{ is divisible by } 5. \}$.

Prove that R is an equivalence relation.

[Click to watch Free Video Solution of this question on Doubnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

35 - 13227

Let $*$ $R \cdot R \rightarrow$ given by $(a, b) \xrightarrow{a + 4b^2}$ is a binary operation.

Compute $(-5) \cdot 2 \cdot 0$.

[Click to watch Free Video Solution of this question on Doubnut](#)


 **doubnut**
पढ़ना हुआ आसान



Now Like, Share Help & Comment

Help Your Friends Solve Their Problems

Update the App now!

GET IT ON




CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

36 - 13241

Let $f, g: R \rightarrow R$ be two functions defined as $f(x) = |x| + x$ and $g(x) = |x| - x$, for all $x \in R$. Then find fog and gof.

[Click to watch Free Video Solution of this question on Doubnut](#)

Find the intervals in which the function given by

$$f(x) = \frac{3}{10}x^4 = \frac{4}{5}x^3 - 3x^2 + \frac{36}{5}x + 11 \text{ is (a) strictly}$$

increasing (b) strictly decreasing.

[Click to watch Free Video Solution of this question on Doubnut](#)

Let $A = \{1, 2, 3, \dots, 9\}$ and R be the relation in $A \times A$ defined by

$(a, b)R(c, d)$ if $a + d = b + c$ for $(a, b), (c, d)$ in $A \times A$. Prove

that R is an equivalence relation. Also obtain the equivalence

class $[(2,5)]$.

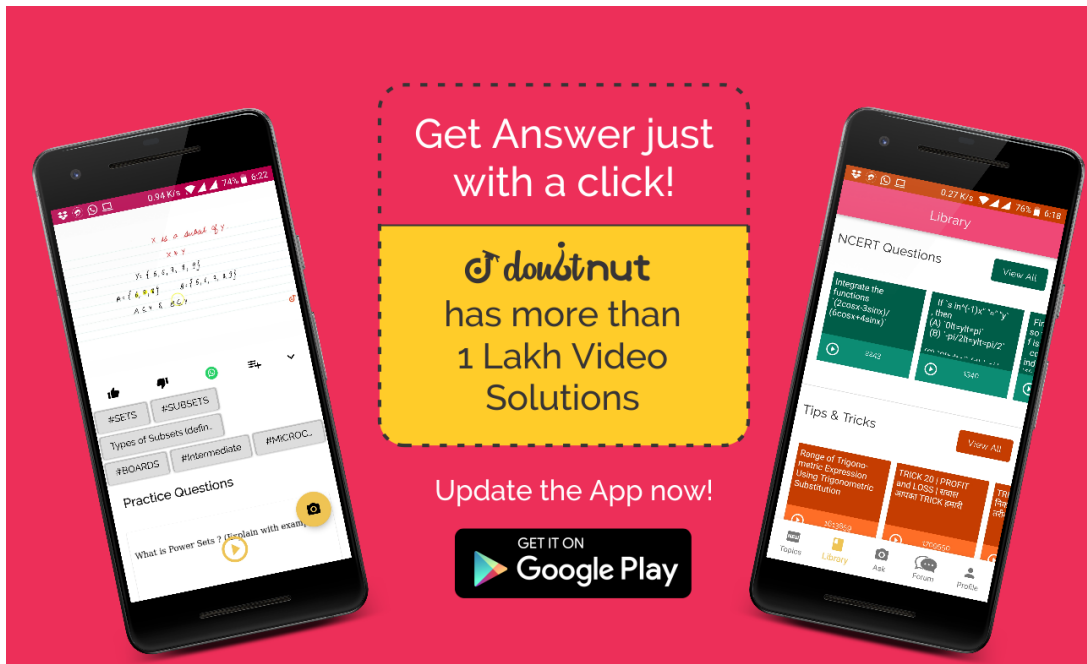
[Click to watch Free Video Solution of this question on Doubnut](#)

Let $*$ be a binary operation, on the set of all-zero real numbers,

given by $a \cdot b = \frac{ab}{5}$ for all $a, b \in \mathbb{R} - \{0\}$. Find the value of x

given that $2 \cdot (x \cdot 5) = 10$.

[Click to watch Free Video Solution of this question on Doubnut](#)



CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

Let R be the equivalence relation in the set

$$A = \{0, 1, 2, 3, 4, 5\} \text{ given by } R = \{(a, b) : \text{divides}(a - b)\}.$$

Write the equivalence class $[0]$.

[Click to watch Free Video Solution of this question on DoubtNut](#)

40 - 13290

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

Let S be the set of all rational number except 1 and $*$ be defined

on S by $a \cdot b = a + b - ab$, for all $a, b \in S$. Prove that (i) $*$ is a

binary operation on S (ii) $*$ is commutative as well as associative.

[Click to watch Free Video Solution of this question on DoubtNut](#)

41 - 13302

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

Let $R = \{(a, a^3) : a \text{ is a prime number less than } 5\}$ be a relation.

Find the range of R .

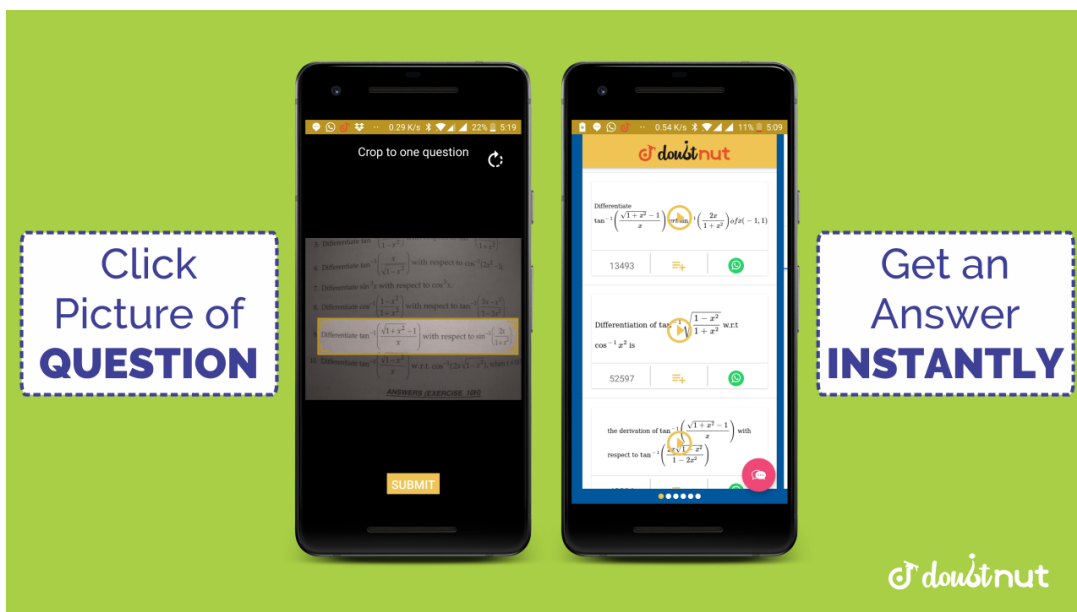
[Click to watch Free Video Solution of this question on DoubtNut](#)

42 - 13315

Let $f: \overrightarrow{W} \rightarrow \overrightarrow{W}$, be defined as $f(x) = x1$, if x is odd and $f(x) = x + 1$, if x is even. Show that f is invertible. Find the inverse of f , where W is the set of all whole numbers.

43 - 13329

[Click to watch Free Video Solution of this question on Doubnut](#)



Show that the relation R in the set $A = \{1, 2, 3, 4, 5\}$ given by $R = \{(a, b) : |a - b| \text{ is divisible by } 2\}$ is an equivalence relation. Write all the equivalence classes of R .

44 - 13343

[Click to watch Free Video Solution of this question on Doubnut](#)

45 - 13377

Let $A = \mathbb{R} \times \mathbb{R}$ and $*$ be the binary operation on A defined by $(a, b) * (c, d) = (a + c, b + d)$. Show that $*$ is commutative and

associative. Find the identity element for $*$ on A .

[Click to watch Free Video Solution of this question on Doubtnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

Let $f: \mathbb{N} \rightarrow \mathbb{R}$ be a function defined as $f(x) = 4x^2 + 12x + 15$.

46 - 13399

Show that $f: \mathbb{N} \rightarrow S$, where S is the range of f , is invertible. Also

find the inverse of f

[Click to watch Free Video Solution of this question on Doubtnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

Show that the binary operation $*$ on $A = \mathbb{R} - \{-1\}$ defined as

$a \cdot b = a + b + ab$ for all $a, b \in A$ is commutative and associative

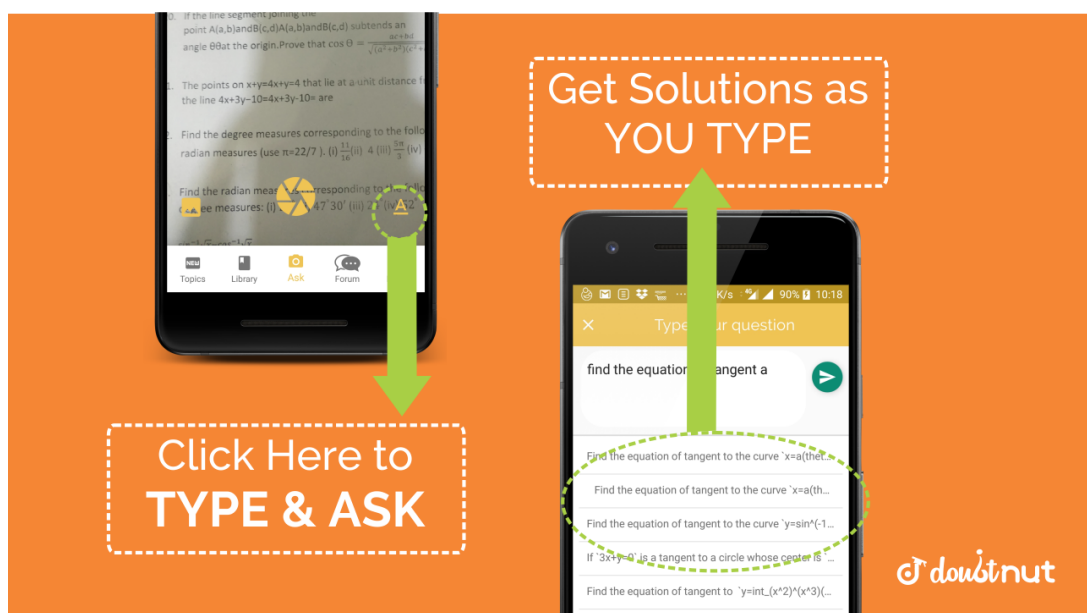
47 - 13458

on A . Also find the identity element of $*$ in A and prove that

every element of A is invertible.

[Click to watch Free Video Solution of this question on Doubtnut](#)

 **doubt nut**
पढ़ना हुआ आसान



Get Solutions as YOU TYPE

Click Here to TYPE & ASK


find the equation of tangent a

Find the equation of tangent to the curve 'x=a(thet...

Find the equation of tangent to the curve 'y=sin'(1...

If '3x+y=0' is a tangent to a circle whose center is ...

Find the equation of tangent to 'y=int_(x^2)'(x^3)(L...



48 - 13462

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

Let $f: \mathbb{N} \rightarrow \mathbb{N}$ be a function defined as $f(x) = 9x^2 + 6x - 5$. Show that $f: \mathbb{N} \rightarrow S$, where S is the range of f , is invertible. Find the inverse of f and hence $f^{-1}(43)$ and $f^{-1}(163)$

[Click to watch Free Video Solution of this question on Doubtnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

49 - 13505

If $f, g: \mathbb{R} \rightarrow \mathbb{R}$ be two functions defined as $f(x) = |x| + x$ and $g(x) = |x| - x, \forall x \in \mathbb{R}$, Then find $f \circ g$ and $g \circ f$. Hence find $f \circ g(-3), f \circ g(5)$ and $g \circ f(-2)$.

[Click to watch Free Video Solution of this question on Doubtnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

50 - 228051

Discuss the commutativity and associativity of binary operation $*$ defined on \mathbb{Q} by the rule $a \cdot b = a - b + ab$ for all $a, b \in \mathbb{Q}$

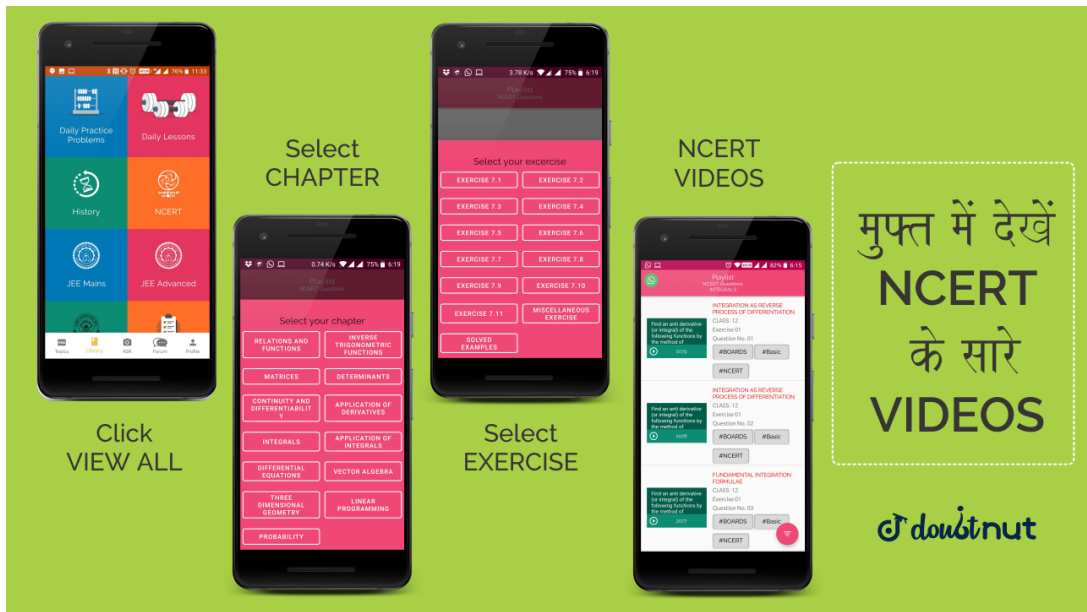
[Click to watch Free Video Solution of this question on Doubtnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

51 - 228164

Consider $f: \mathbb{R} \rightarrow \left\{ -\frac{4}{3} \right\} \rightarrow \mathbb{R} - \left\{ \frac{4}{2} \right\}$ given by $f(x) = \frac{4x + 3}{3x + 4}$ Show that f is bijective. Find the inverse of f and hence find $f^{-1}(0)$ and x such that $f^{-1}(x) = 2$.

[Click to watch Free Video Solution of this question on Doubtnut](#)



CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

52 - 228186

Let $A = \mathbb{R} - \{3\}$, $B = \mathbb{R} - \{1\}$, and let $f: A \rightarrow B$ be defined by $f(x) = \frac{x - 2}{x - 3}$ is f invertible? Explain.

[Click to watch Free Video Solution of this question on Doubtnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

53 - 1166912

If $a * b$, denoted the larger of 'a' and 'b' and if $a \circ b = a \cdot b + 3$, then write the value of $(5) \circ (10)$, where $*$ and \circ are binary operations.

[Click to watch Free Video Solution of this question on Doubtnut](#)

54 - 1167046

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

Let $A = \{x \in \mathbb{Z} : 0 \leq x \leq 12\}$. Show that $R = \{(a, b) : a, b \in A, |a - b| \text{ is divisible by } 4\}$ is an equivalence relation. Find the set of all elements related to 1. Also write the equivalence class

[Click to watch Free Video Solution of this question on Doubtnut](#)

CLASS 12 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 1. RELATIONS AND FUNCTIONS

Show that the function $f: \mathbb{R} \rightarrow \mathbb{R}$ defined by

$$f(x) = \frac{x}{x^2 + 1} \quad \forall x \in \mathbb{R}$$
 is neither one-one nor onto. Also if

$$g: \mathbb{R} \rightarrow \mathbb{R}$$
 is defined by $g(x) = 2x - 1$ find $f \circ g(x)$

[Click to watch Free Video Solution of this question on Doubtnut](#)

[Download Doubtnut to Ask Any Math Question By just a click](#)

[Get A Video Solution For Free in Seconds](#)

[Doubtnut Has More Than 1 Lakh Video Solutions](#)

[Free Video Solutions of NCERT, RD Sharma, RS Aggarwal, Cengage \(G.Tewani\), Resonance DPP, Allen, Bansal, FIITJEE, Akash, Narayana, VidyaMandir](#)

[Download Doubtnut Today](#)

doubtnut

Get Answer just with a click!

doubtnut has more than 1 Lakh Video Solutions

Update the App now!

GET IT ON Google Play

The advertisement features two smartphones. The left phone displays a handwritten math solution for the problem above, with the function $f(x) = \frac{x}{x^2 + 1}$ and a question about whether it is one-one or onto. The right phone shows the app's 'Library' screen with various question cards, including 'Integrate the functions' and 'Range of Trigonometric Expression'. A central yellow box with a dashed border contains the text 'doubtnut has more than 1 Lakh Video Solutions'. Below this, it says 'Update the App now!' and features the 'GET IT ON Google Play' logo.