

Riviera International Academy

Revision Assignment-2078

Day 5 (Jestha19, 2078, Wednesday)

Class: Ten

Subject - Social Studies

Unit VII. 1. Sources of Nepalese History

Subject- HPE

Write an essay about" Present situation of the population growth"

Subject – English

The Chimney Sweeper (questions and answers)

Subject – Opt. Maths

1. Define Inverse Function.
2. If $f(x) = x + 2$, find $f^{-1}(x)$.
3. If $f(x) = x - 3$, find $f^{-1}(x)$.
4. If $k(x) = 2x + 5$, find $k^{-1}(x)$.
5. If $h(x) = 3 - 2x$, find $h^{-1}(x)$.
6. If $f(x) = \frac{2x-5}{3}$, find $f^{-1}(x)$.
7. If $h(x) = \frac{1-2x}{5}$, find $h^{-1}(x)$.
8. If $k(x) = \frac{1-x}{2-3x}$, find $k^{-1}(x)$.
9. If $p(x) = \frac{5-2x}{2-5x}$, find $p^{-1}(x)$.
10. If $f(x) = x + 2$ and $g(x) = 2x - 1$, find $(f \circ g)^{-1}(x)$.
11. If $k(x) = 1 - 2x$ and $g(x) = 5x - 7$, find $(k \circ g)^{-1}(x)$ and $(g \circ k)^{-1}(x)$.
12. If $f(x) = x + 2$ and $g(x) = 2x - 1$, find $f \circ g^{-1}(x)$ and $g \circ f^{-1}(x)$.
13. If $k(x) = 1 - 2x$ and $g(x) = 5x - 7$, find $f \circ g^{-1}(x)$ and $f \circ f^{-1}(x)$.
14. If $f(x + 3) = 3x + 1$, find $f(x)$.

15. If $f(x + 1) = 2x + 5$, find $f(x)$.
16. If $f(x - 5) = 3x - 7$, find $f(x)$.
17. If $g(x + 13) = 13x + 7$, find $g^{-1}(x)$.
18. If $h(2x - 1) = 5x + 10$, find $h^{-1}(x)$.
19. If $k(3x + 5) = 10x + 1$, find $k^{-1}(x)$.
20. If $p(1 - 20x) = 3x - 5$, find $p^{-1}(x)$.
21. If $g(3 - 12x) = 7 - 4x$, find $g^{-1}(x)$.

Subject – Mathematics

Do the exercise of 1&2 from 8.2

9.2

EXERCISE 8.2

General section

1. Find the L.C.M. of the following expressions.
 - a) $3x(x + 1)(x - 1)$ and $2x^2(x - 1)(x + 3)$
 - b) $4x^3(x - 3)(x + 2)$ and $6x^2(x + 2)(x + 3)$
 - c) $8a^2b(a - b)(a^2 + ab + b^2)$ and $12ab^2(a - b)(a + b)$
 - d) $(x + 2)(x + 3)$, $(x + 3)(x - 2)$, $(x - 2)(x - 3)$
 - e) $(a - 3)(a - 4)$, $(a - 4)$, $(a - 5)$, $(a - 5)(a - 3)$
2. Find the L.C.M. of the following expressions.

a) $3x^2 + 6x$, $2x^3 + 4x^2$	b) $ax^2 + ax$, $ax^2 - a$	c) $4x^5y^4 + 2x^4y^5$, $10x^4y^3 + 5x^3y^4$
d) $x^2 - xy$, $x^3y - xy^3$	e) $4x^2 - 2x$, $8x^3 - 2x$	f) $a^3 - b^3$, $a^2 + ab + b^2$
g) $x^2 + 5x + 6$, $x^2 - 4$	h) $x^2 - 9$, $3x^3 + 81$	i) $a^4b - ab^4$, $a^4b^2 - a^2b^4$
j) $x^4 + x^2y^2 + y^4$, $x^3 - y^3$	k) $a^4 + a^2b^2 + b^4$, $a^3 + b^3$	l) $6x^2 - x - 1$, $54x^4 + 2x$

Creative Section

3. Find the L.C.M. of the following expressions.

a) $a^2 - 4$, $a^3 - 8$, $(a + 2)^2$	b) $(a - 3)^2$, $a^2 - 9$, $a^3 + 27$
c) $a^3 - 2a^2 + a$, $a^3 + a^2 - 2a$, $a^3 - 4a$	d) $x^4 - y^4$, $x^2 - y^2$, $x^3 - y^3$
e) $4x^3 - 10x^2 + 4x$, $3x^4 - 8x^3 + 4x^2$, $x^4 - 8x$	f) $x^3 - 9x$, $x^4 - 2x^3 - 3x^2$, $x^3 - 27$
g) $a^3 - 4a$, $a^4 - a^3 - 2a^2$, $a^3 - 8$	h) $a^4 + a^2 + 1$, $a^3 - 1$, $a^3 - a^2 + 1$
i) $a^2 + 2ab + b^2 - c^2$, $b^2 + 2bc + c^2 - a^2$, $c^2 + 2ca + a^2 - b^2$	
j) $x^3 - 2x^2y + 2xy^2 - y^3$, $x^4 - y^4$, $x^3 + y^3$	
k) $x^2 + 3x + 2$, $x^2 + 5x + 6$, $x^2 + 4x + 3$	
l) $2x^3 + 2x^2 - 12x$, $6x^3 - 6x^2 - 72x$, $4x^3 - 24x^2 + 32x$	

I NOTE 9

The End.