Provincial Department of Education – Sabaragamuwa – Week School

Week: 16ᵗʰ – 22ⁿᵈ May, 2021

Subject: Mathematics

Grade -10

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15 – Equations

01. Simplify.

i. $3x - 36 = 1$

ii. $2(17 - x) = 10$

iii. $\dfrac{s-8}{3} = -4$

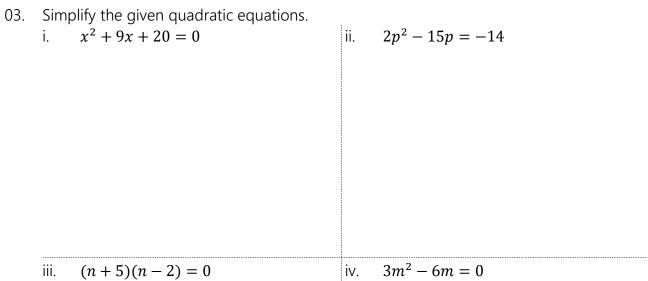iv. $\dfrac{3}{a+1} = \dfrac{5}{2a+1}$

v. A boy had 25 coins with him. They are two-rupee coins and five-rupee coins. Sum of money of those coins is Rs.95. Find the number of each coin separately.

vi. Damith will be 5 minutes late if he walks to railway station from home at the speed of 4kmh^{-1}. He will go to the station 5 minutes early if the speed is 6kmh^{-1}. Find the distance from home to the railway station.

02. Simplify the following simultaneous equations.

i. $2x + y = 7$
$2x - y = 1$

ii. $2r - 3s = 19$
$3r - s = 11$

iii. Price of an orange and a king coconut is Rs.25. Three king coconuts can be bought for the price of two oranges. Find the price of two types of fruits separately.

03. Simplify the given quadratic equations.

i. $x^2 + 9x + 20 = 0$

ii. $2p^2 - 15p = -14$

iii. $(n+5)(n-2) = 0$

iv. $3m^2 - 6m = 0$

v. $\dfrac{(t+2)}{3} = \dfrac{(t-4)}{t}$