



ST. LAWRENCE HIGH SCHOOL



A Jesuit Christian minority Institution

Subject: Mathematics

Class- X

Date:11/05/2020

Answer key of Worksheet-24

Chapter- surds

Topic- Basic concepts of surds

1.Choose the correct alternative.

1x15=15

a) Square root of 32 is Ans ii) $4\sqrt{2}$

b) $\sqrt{25/2} =$ _____ Ans i) $\frac{5\sqrt{2}}{2}$

c) Find the common surd factor between $\sqrt{8}$ and $\sqrt{49/2}$

Ans iii) $\sqrt{2}$

d) $\sqrt{108} - \sqrt{75} =$ _____ Ans ii) $\sqrt{3}$

e) $\sqrt{98} + \sqrt{8} - 2\sqrt{32} =$ _____ Ans ii) $\sqrt{2}$

f) $3\sqrt{48} - 4\sqrt{75} + \sqrt{192} =$ _____ Ans iii) 0

g) Simplest value of $\sqrt{12} + \sqrt{18} + \sqrt{27} - \sqrt{32} =$ _____ Ans i) $5\sqrt{3} - \sqrt{2}$

h) what should be added with $\sqrt{5} + \sqrt{3}$ to get $2\sqrt{5}$.

Ans ii) $\sqrt{5} - \sqrt{3}$

i) What to subtract from $7-\sqrt{3}$ to get $3+\sqrt{3}$ Ans i) $4- 2\sqrt{3}$

j) Subtract $(-5 + 3\sqrt{11})$ from $(10 - \sqrt{11})$.

Ans ii) $15 - 4\sqrt{11}$

k) $2\sqrt{5} \times 3\sqrt{2} = \underline{\hspace{2cm}}$ Ans) $6\sqrt{10}$

l) Rationalising $\sqrt{13} / \sqrt{5}$ we get Ans iii) $\sqrt{65} / 5$

m) rationalizing factor of $\sqrt{7}$ Ans iii) (i) and (ii) both

n) Rationalising factor of $7 - \sqrt{3}$ Ans) $7 + \sqrt{3}$

o) Rationalising $6/\sqrt{7}$ we get Ans ii) $6\sqrt{7} / 7$

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