



Work sheet No-2

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Logarithmic Functions and its applications

1.Convert from each to other:

(i) $\log_2 32 = 5 =$

(ii) $\log_e 1 = 0 =$

(iii) $\log_8 16 = \frac{4}{3}$

(iv) $36 = 6^2 \Rightarrow 1$

(v) $8 = 16^{\frac{1}{4}} \Rightarrow$

(vi) $M = b^x \Rightarrow 1$

2.Solve each of the following equations:

(i) $\log_3(x - 1) = 2$

(ii) $\log_2 x + \log_2(x - 4) = 5$

(iii) $\log_3(x - 5) + \log_3(x + 3) = 2$

(iv) $\log_2(x^2 + 2x) - \log_2 x = 3$

(v) $\log_4(x - 3) + \log_4 3 = \log_4(2x - 1)$

(vi) $\log_3(x + 2) - \log_3(4x + 3) = \log_3(1/x)$