

30. If $y = e^x + e^{-x}$ then $\frac{dy}{dx} - \sqrt{y^2 - 4}$ is equal to
a) 1 b) -1 c) 0 d) none of these
31. The derivative of $(x^2-1)/x$ is
a) $1 + 1/x^2$ b) $1 - 1/x^2$ c) $1/x^2$ d) none of these
32. The differential coefficients of $(x^2+1)/x$ is
a) $1 + 1/x^2$ b) $1 - 1/x^2$ c) $1/x^2$ d) none of these
33. If $y = e^{\sqrt{2x}}$ then $\frac{dy}{dx}$ is equal to _____.
a) $\frac{e^{\sqrt{2x}}}{\sqrt{2x}}$ b) $e^{\sqrt{2x}}$ c) $\frac{e^{\sqrt{2x}}}{\sqrt{2x}}$ d) none of these
34. If $x = (1 - t^2)/(1 + t^2)$ $y = 2t/(1 + t^2)$ then dy/dx at $t=1$ is _____.
a) 1/2 b) 1 c) 0 d) none of these
35. $f(x) = x^2/e^x$ then $f'(1)$ is equal to _____.
a) $-1/e$ b) $1/e$ c) e d) none of these