

Class – 12th

Chapter-8

Subject Maths

Worksheet-37

Application of Derivatives

Using differentials, find the approximate value of each of the following.

1. $(0.009)^{1/3}$

2. $(0.999)^{1/10}$

3. $\sqrt{0.0037}$

4. $\frac{1}{(2.002)^2}$

5. $(15)^{1/4}$

6. $\sqrt{401}$

7. $(3.968)^{3/2}$

8. $(32.15)^{1/5}$

9. $\sqrt{0.6}$

10. $\log_{10}(10.1)$, when $\log_{10} e = 0.4343$

11. $\log_e(10.02)$, when $\log_e 10 = 2.3026$