

WORLD MISSION HIGH SCHOOL

MATHEMATICS FOR LEVEL 5 ALL (MMP, NIT &SOD)

TIME FOR SUBMISSION: 15th SEPTEMBER 2025

**Find the indefinite integral of a function:
(use the basic indefinite integral formulas and rules)**

a) $\int (3x^2 - 6x + 3)dx$	j) $\int (\sqrt{x} + \sqrt[5]{x} + \sqrt[9]{x})dx$
b) $\int (8x^3 - x^2 + 5x - 1)dx$	k) $\int (\sqrt[5]{x^7} - \sqrt[4]{x^8} + \sqrt[3]{x^9})dx$
c) $\int \left(x^5 + \frac{1}{4}x^4 + \frac{1}{3}x^3 \right) dx$	
d) $\int \left(-\frac{x^4}{2} - \frac{x^3}{3} - \frac{x^2}{6} \right) dx$	
e) $\int (2x - 6)^3 dx$	
f) $\int ((\sqrt{x} - 5)^2 - x)^2 dx$	
g) $\int (x^{10} - x^8 + x^6 - x^4)dx$	
h) $\int (x^{-5} + x^{-3} + x^{-1})dx$	
i) $\int \left(\frac{16}{x^5} - \frac{9}{x^4} + \frac{4}{x^3} \right) dx$	

END!!!!!!!!!!!!!!