



Numerion Academy
STRUCTURED PATHWAY TO HIGHER STUDY SCORES

STUDENT NAME _____
YEAR OF STUDY _____

IB DIPLOMA MATHEMATICS (YEAR 11) (YEAR 11) · PRACTICE ASSIGNMENT

Functions and Trigonometry Practice

FUNCTIONS MEDIUM

Work through each question in order. Show your working in the space provided where it helps — there's no time limit, just do your best.

- 1

Write 3.4×10^4 in full.
- 2

Find $f(2)$ if $f(x) = 2x^2 - 3x + 1$.
- 3

Find the length of side c in a triangle with sides $a = 7$, $b = 9$ and included angle $C = 60^\circ$, using the cosine rule.
- 4

A bag has 5 red and 3 blue counters. Two are drawn without replacement. Find the probability both are red.
- 5

Differentiate $f(x) = 5x^3 - 2x$.

TEACHER'S REMARKS

Score: _____ / 5