

Step Academy official

Model Town Grw PH: 03016652757

STUDENT NAME	
PAPER CODE	85977
TIME ALLOWED	60
Paper Date	02-02-2026



CLASS	New 1st Year (FSC/ICS)
SUBJECT	Mathematics
TOTAL MARKS	25
Paper Type	

Q1. Choose the correct answer.

5X1=5

1. If $f(x) = \sqrt{2x-3}$ then $f(1) = ?$

(A) ± 1 (B) $\pm i$ (C) ± 2 (D) 0

2. A bijective function is:

(A) Both one-one and onto (B) One-one but not onto (C) Onto, but not one-one (D) Neither one-one nor onto

3. If $f(x) = \sqrt{2x-3}$ then $f(1) = ?$

(A) ± 1 (B) $\pm i$ (C) ± 2 (D) 0

4. Graph of quadratic equation will be:

(A) Straight line (B) Curve (C) Set of lines (D) None

5. Point of intersection $f(x) = 2x+5$ and $g(x) = -x+5$ is a point which satisfies:

(A) $f(x)$ (B) $g(x)$ (C) Both $f(x)$ and $g(x)$ (D) None

Q2. write the answers of following questions.

5X2=10

1. Find $\frac{f(a+h)-f(a)}{h}$ and simplify where: $f(x) = 4x+7$

2. Consider the function $f(x) = 3x-5$. Is the function f onto if the co-domain is all real numbers? Explain.

3. Given $f(x) = x^3 - 2x^2 + 4x - 1$ find: $f(1+x)$

4. Find the point (s) of intersection of the following function graphically: $f(x) = 3x-2$, $g(x) = 10-x$

5. Graph the following function: $y = 2\sqrt[3]{x} - 3$

Q3. Write detailed answers of the following questions.

2X5=10

1. Solve the linear function $y = -x+3$ and quadratic function $y = x^2 - 6x + 3$ graphically.

2. Graph the square root function $y = 2\sqrt{x} + 1$