

Step Academy official

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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 $y = 2\sqrt{x} + 1$