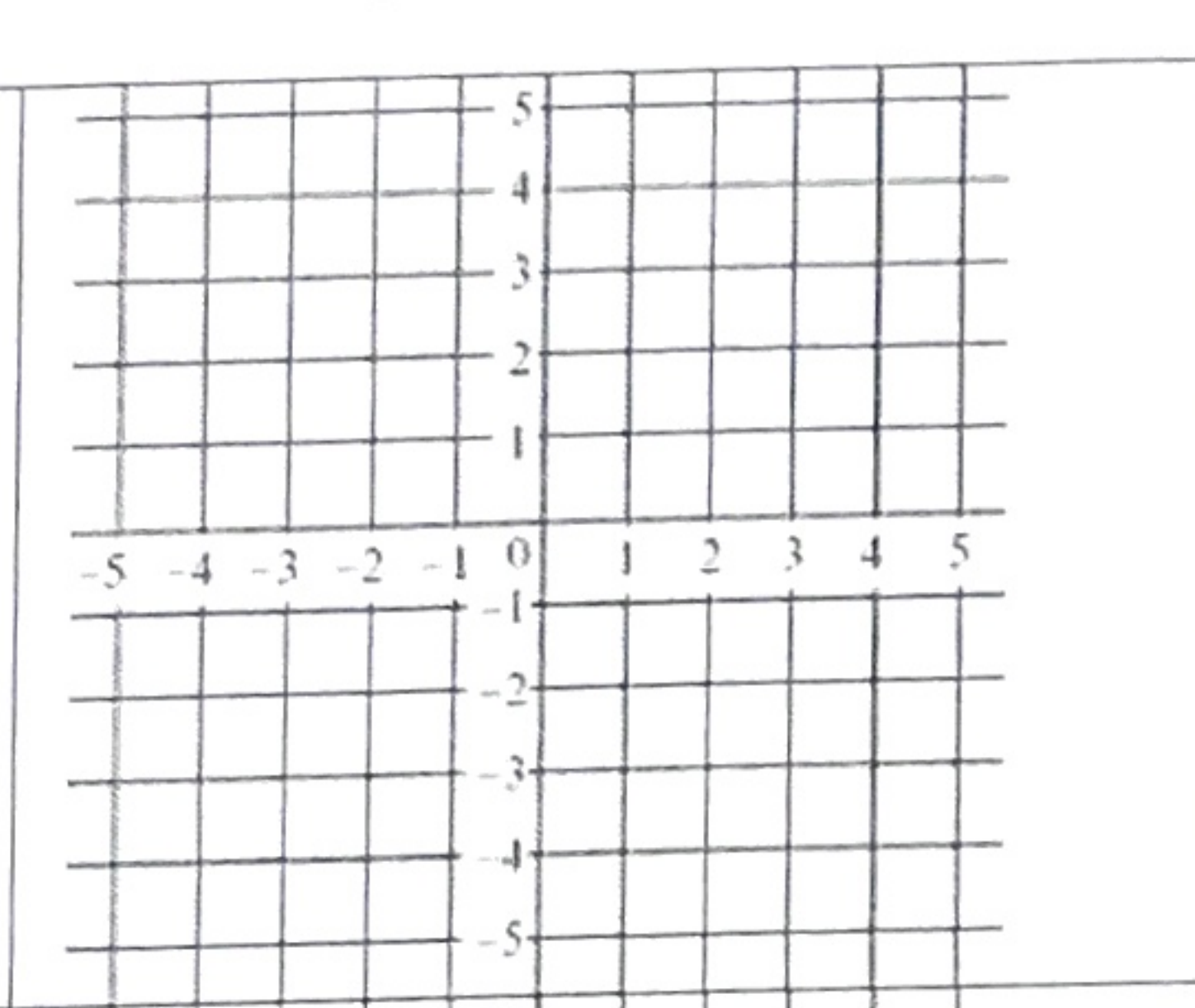
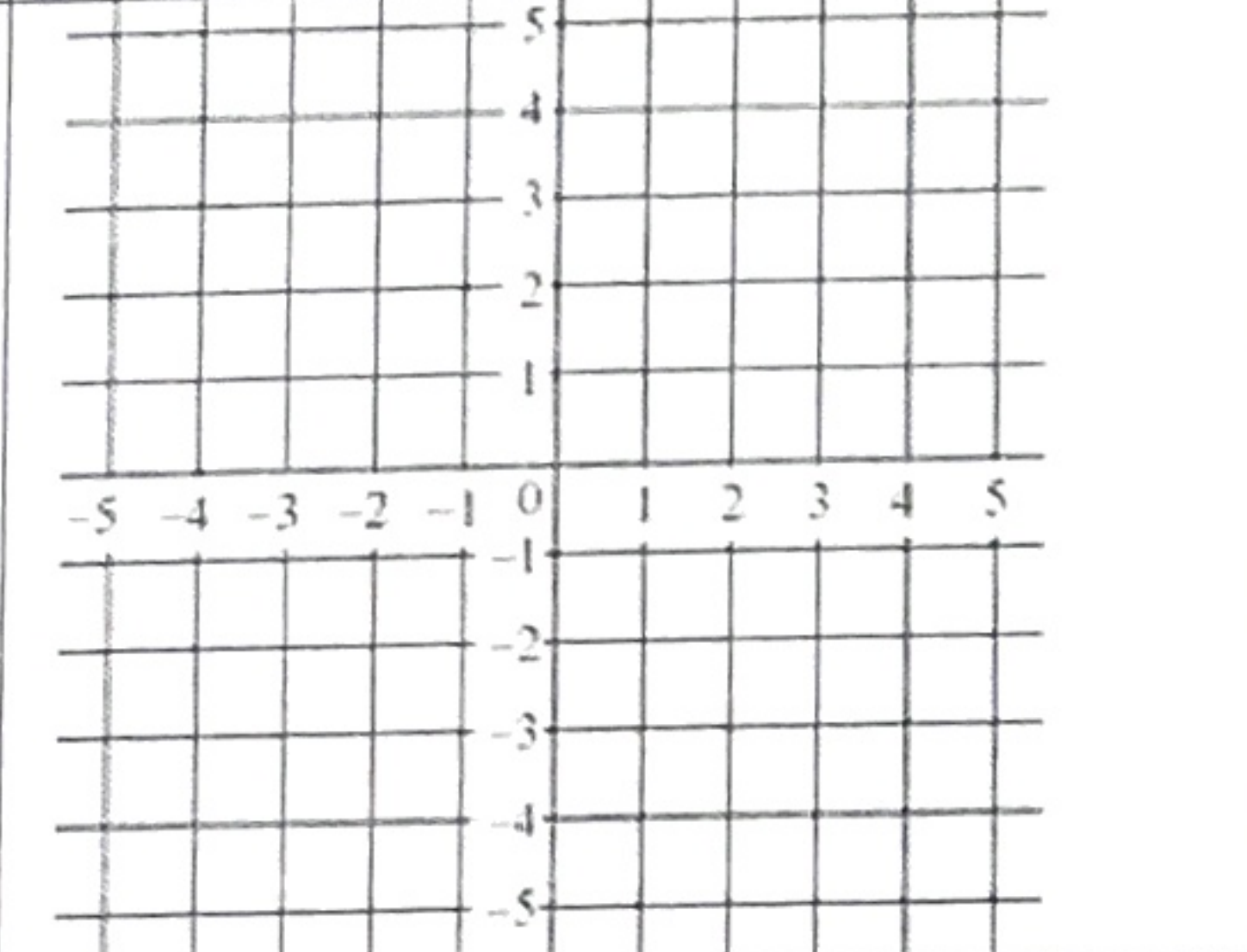
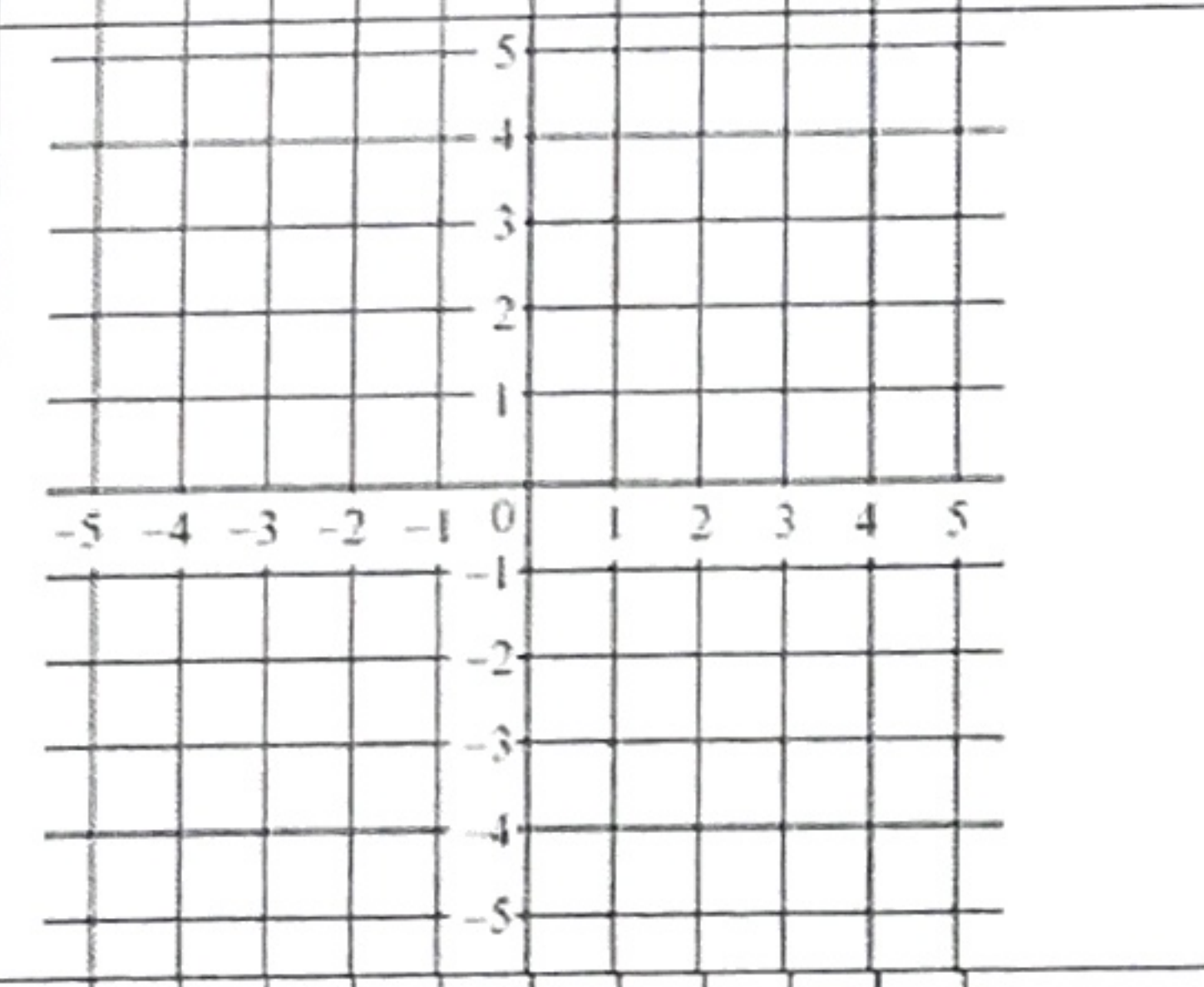
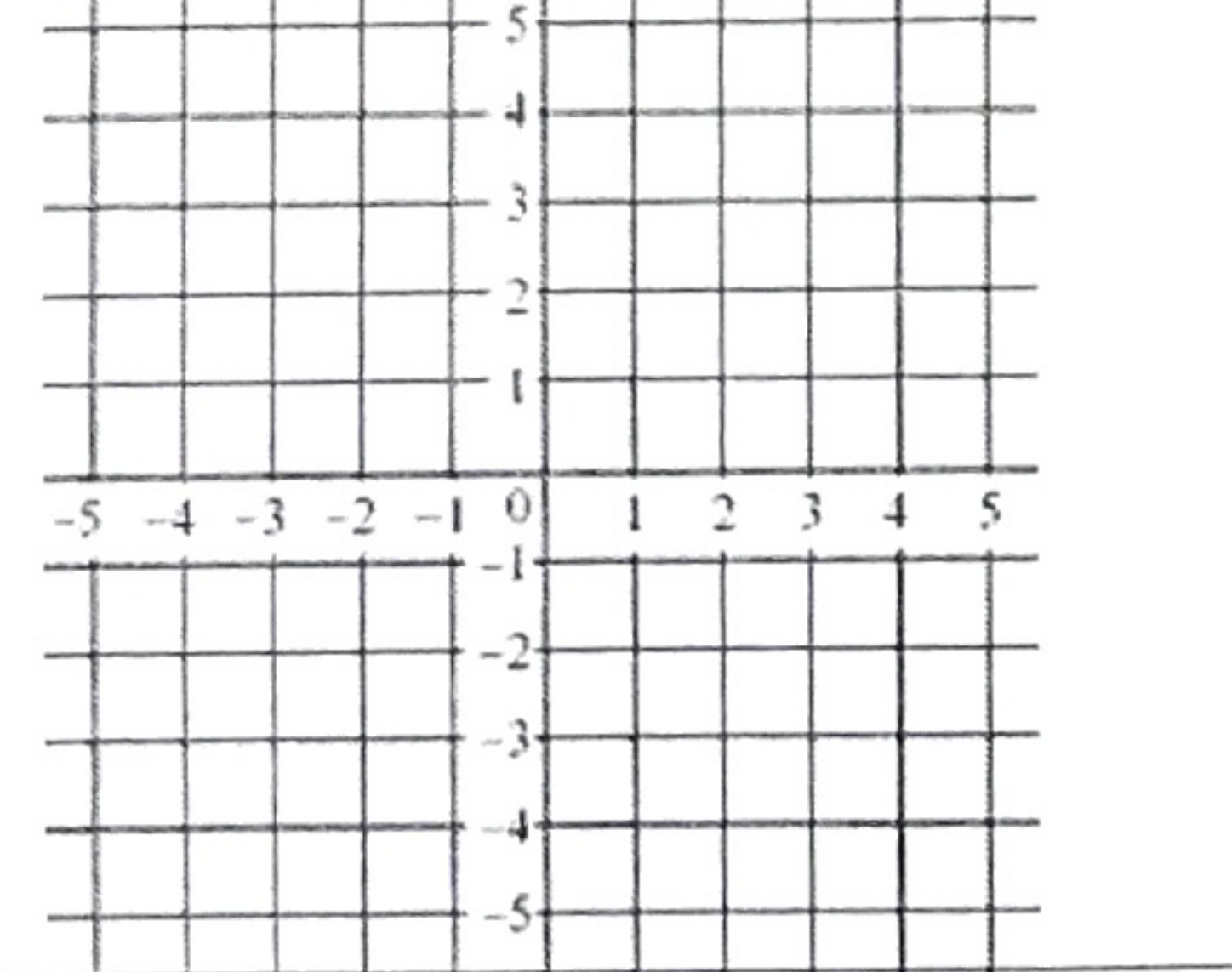
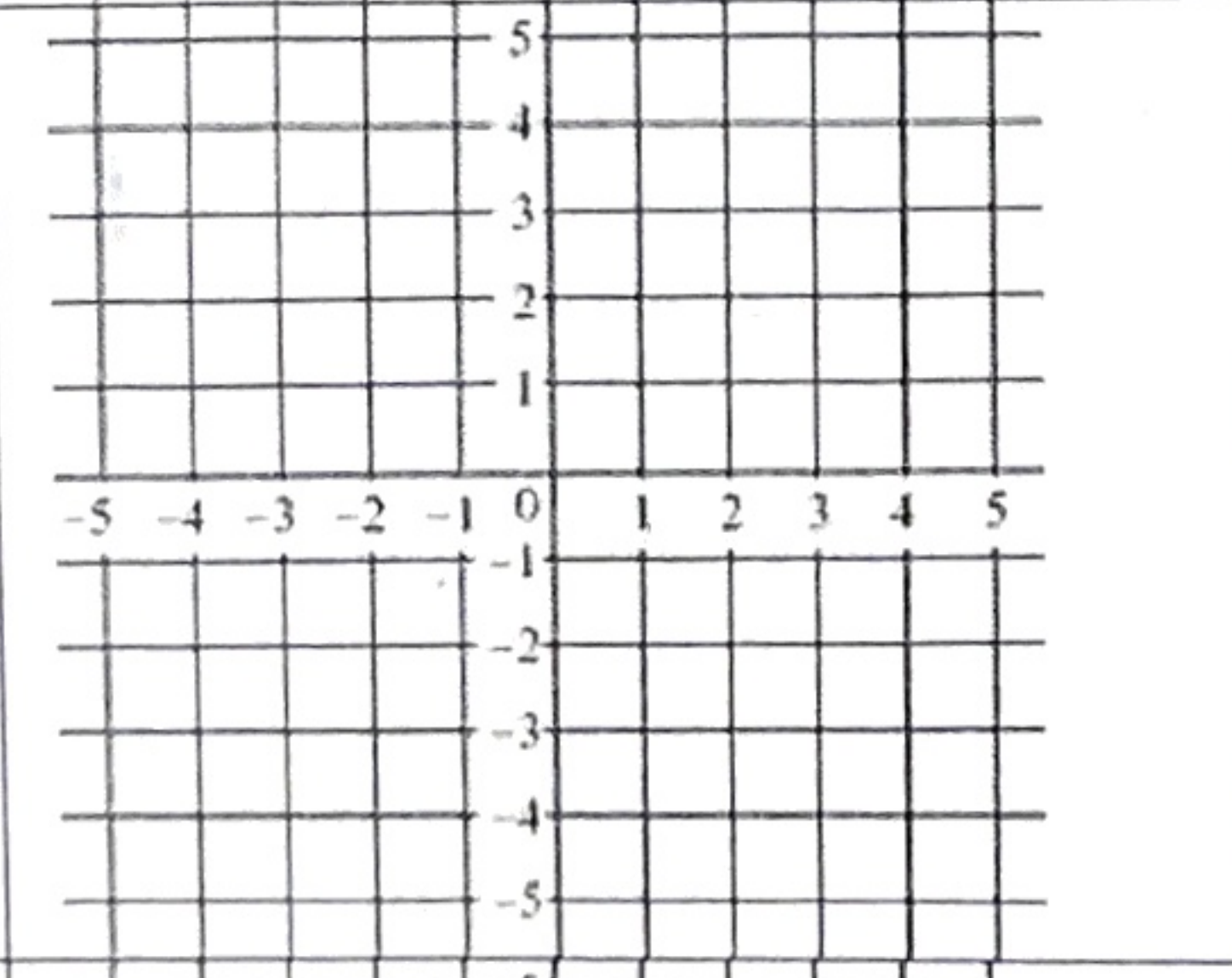
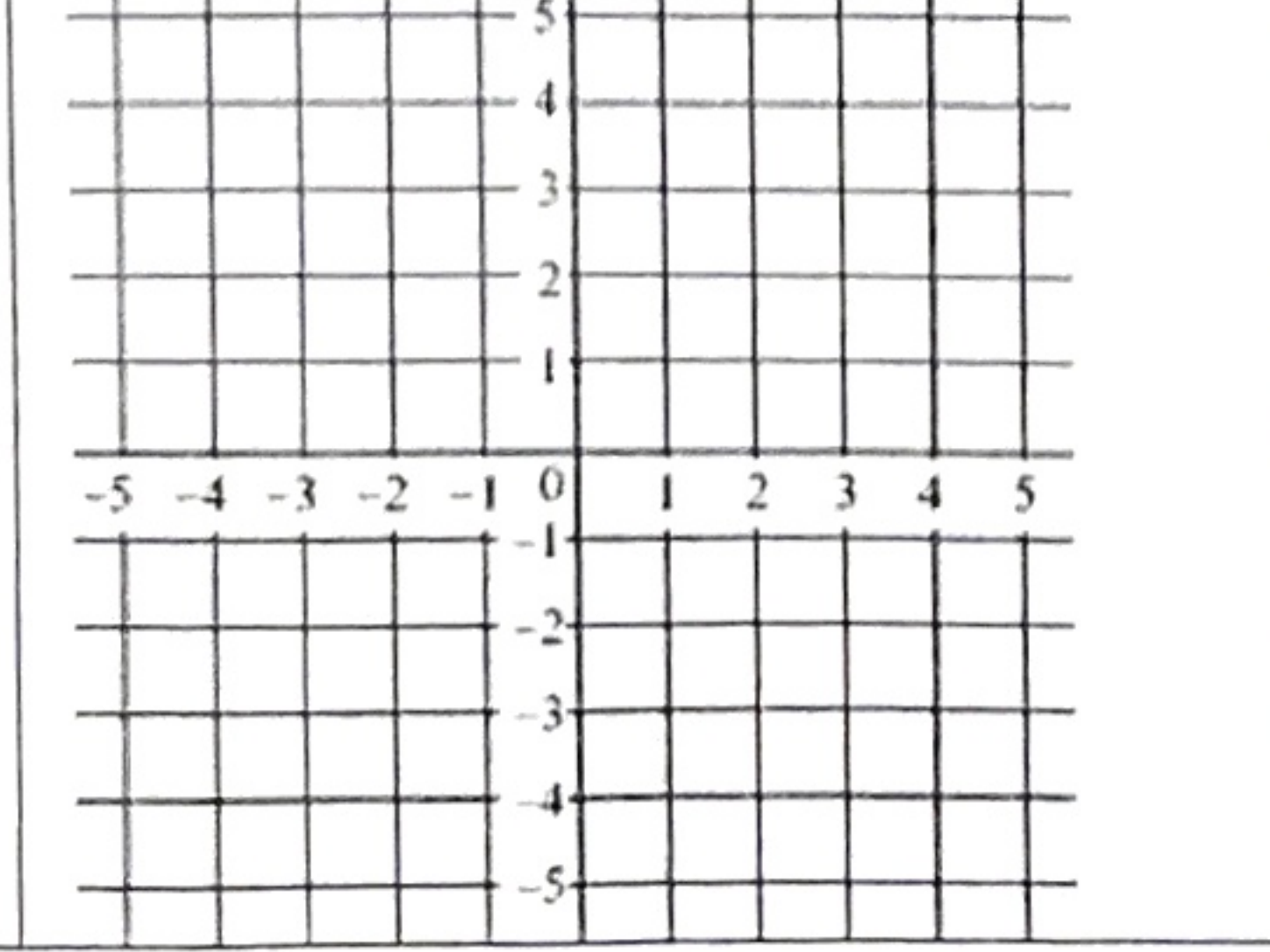


**Unit 4 Day 9: Solving a system Practice**

Focus Question: Can I check my work by solving a system a 2<sup>nd</sup> way?

do 1st

Current Letter	System of Equations	Graph if you don't trust →	$f(x) = g(x)$	Solution	Takes us to letter...
N	$f(x) = -x + 1$ $g(x) = x - 1$		$\begin{array}{r} -x + 1 = x - 1 \\ +x \quad \quad +x \\ \hline 1 = 2x - 1 \\ +1 \quad \quad +1 \\ \hline 2 = 2x \\ \frac{2}{2} = \frac{2x}{2} \end{array}$ $\left. \begin{array}{l} 2 = 2x \\ 1 = x \end{array} \right\} \begin{array}{l} g(1) = 1 - 1 \\ = 0 \end{array}$	(1, 0)	G
G	$f(x) = -x + 3$ $g(x) = x + 1$		$\begin{array}{r} -x + 3 = x + 1 \\ +x \quad \quad +x \\ \hline 3 = 2x + 1 \\ -1 \quad \quad -1 \\ \hline 2 = 2x \\ \frac{2}{2} = \frac{2x}{2} \end{array}$ $\left. \begin{array}{l} 2 = 2x \\ 1 = x \end{array} \right\} \begin{array}{l} g(1) = 1 + 1 \\ = 2 \end{array}$	(1, 2)	F
F	$f(x) = 2x - 4$ $g(x) = -\frac{1}{2}x + 1$		$\begin{array}{r} 2x - 4 = -\frac{1}{2}x + 1 \\ +\frac{1}{2}x \quad \quad +\frac{1}{2}x \\ \hline \frac{5}{2}x - 4 = 1 \\ +4 \quad \quad +4 \\ \hline \frac{5}{2}x = 5 \\ \frac{2}{5} \cdot \frac{5}{2}x = \frac{2}{5} \cdot 5 \\ x = 2 \end{array}$ $\left. \begin{array}{l} \frac{5}{2}x = 5 \\ x = 2 \end{array} \right\} \begin{array}{l} f(2) = 2(2) - 4 \\ = 4 - 4 \\ = 0 \end{array}$	(2, 0)	M
M	$f(x) = 2x + 1$ $g(x) = 2x + 1$		$2x + 1 = 2x + 1$ <p>True</p>	$\infty$	R
R	$f(x) = \frac{1}{2}x$ $g(x) = x - 2$		$\begin{array}{r} \frac{1}{2}x = x - 2 \\ -\frac{1}{2}x \quad \quad -x \\ \hline -\frac{1}{2}x = -2 \\ \frac{-2}{-\frac{1}{2}} = \frac{-2}{-\frac{1}{2}} \\ x = 4 \end{array}$ $\left. \begin{array}{l} -\frac{1}{2}x = -2 \\ x = 4 \end{array} \right\} \begin{array}{l} f(4) = \frac{1}{2}(4) \\ = 2 \end{array}$	(4, 2)	J

D	$f(x) = 2x - 3$ $g(x) = x - 1$		$\begin{array}{r} 2x - 3 = x - 1 \\ -x \quad -x \\ \hline x - 3 = -1 \\ +3 \quad +3 \\ \hline x = 2 \end{array}$ $g(2) = 2 - 1 = 1$	(2, 1)	A
A	$f(x) = -x + 4$ $g(x) = 2x + 1$		$\begin{array}{r} -x + 4 = 2x + 1 \\ +x \quad +x \\ \hline 4 = 3x + 1 \\ -1 \quad -1 \\ \hline 3 = 3x \\ \frac{3}{3} \quad \frac{3}{3} \\ x = 1 \end{array}$ $g(1) = 2(1) + 1 = 2 + 1 = 3$	(1, 3)	F
F	$f(x) = 3x$ $g(x) = 5x$		$\begin{array}{r} 3x = 5x \\ -3x \quad -3x \\ \hline 0 = 2x \\ \frac{0}{2} \quad \frac{2x}{2} \\ 0 = x \end{array}$ $f(0) = 3(0) = 0$	(0, 0)	K
K	$f(x) = 2x$ $g(x) = 2x - 5$		$\begin{array}{r} 2x = 2x - 5 \\ -2x \quad -2x \\ \hline 0 = -5 \\ \text{False} \end{array}$	$\emptyset$	T
T	$f(x) = -3x + 1$ $g(x) = 3x + 7$		$\begin{array}{r} -3x + 1 = 3x + 7 \\ +3x \quad +3x \\ \hline 1 = 6x + 7 \\ -7 \quad -7 \\ \hline -6 = 6x \\ \frac{-6}{6} \quad \frac{6x}{6} \\ x = -1 \end{array}$ $g(-1) = 3(-1) + 7 = -3 + 7 = 4$	(-1, 4)	B
B	$f(x) = x + 1$ $g(x) = \frac{1}{2}x$		$\begin{array}{r} x + 1 = \frac{1}{2}x \\ -x \quad -x \\ \hline -\frac{2}{2} \cdot 1 = -\frac{1}{2}x \cdot \frac{2}{2} \\ \frac{-2}{1} \quad \frac{-\frac{1}{2}x \cdot 2}{1} \\ -2 = x \end{array}$ $f(-2) = -2 + 1 = -1$	(-2, -1)	N