

Class IX

Mathematics

Surprise Test on Pre-Mid Term Chapters

F.M.-15

Date: 19-06-2025

Time: 30 minutes

A. Choose the correct option: [$1 \times 3 = 3$]

1. The value of $\sqrt{7.5}$ lies between –

(a)	2 and 3	(b)	3 and 4	(c)	4 and 5	(d)	1 and 2
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2. The simplest form of $\left(\frac{256}{625}\right)^{-\frac{1}{4}}$ is –

(a)	$\frac{5}{2}$	(b)	$\frac{2}{5}$	(c)	$\frac{4}{5}$	(d)	$\frac{5}{4}$
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3. A point $P(x, y)$ lies in the IInd quadrant. If the signs of x and y are interchanged, then it lies in –

(a)	Quadrant I	(b)	Quadrant II	(c)	Quadrant III	(d)	Quadrant IV
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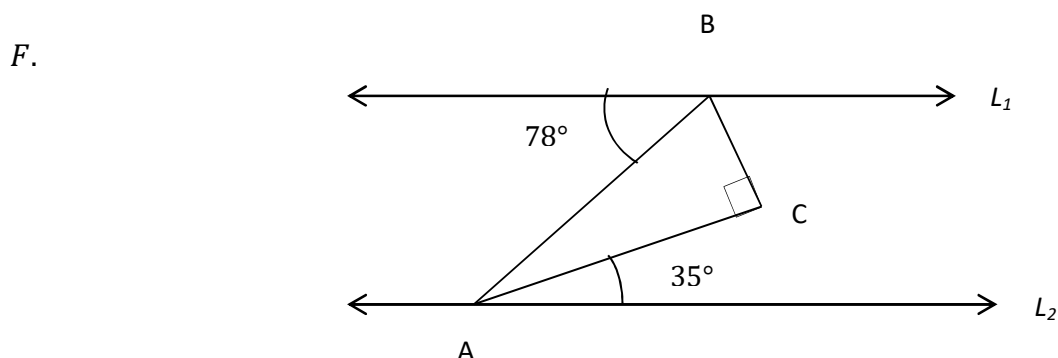
B. Factorise the following: [2]

$$8x^3 - 125y^3 + 180xy + 216$$

C. Simplify: $\frac{x^3 + 4x^2 - x - 4}{x^2 + 3x - 4}$ [3]

D. Rationalise the denominator: $\frac{2\sqrt{6} - \sqrt{5}}{3\sqrt{5} - 2\sqrt{6}}$ [2]

E. If $x = 9 - 4\sqrt{5}$, find the value of $\sqrt{x} + \frac{1}{\sqrt{x}}$ [3]



In the above figure, $BC \perp AC$ and $l_1 \parallel l_2$. Find the measure of $\angle ABC$. [2]