

APOLLO

Equations of Tangent and Normal

FBISE Mathematics Class 12 (HSSC-II)

Domain B: Geometry

9 questions | questions

Original FBISE question crops. National Curriculum 2022-23 topic.

xix.	For what value of a , line $2x - 3y + 6 = 0$ is tangent to the parabola $y^2 = 4ax$?	$-\frac{4}{3}$	$-\frac{3}{4}$	$\frac{4}{3}$	$\frac{3}{4}$
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xx.	If $x - y + \lambda = 0$ is tangent to ellipse $\frac{x^2}{9} + \frac{y^2}{4} = 1$, then value of λ is:	$\pm\sqrt{13}$	± 2	$\pm\sqrt{5}$	± 3
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	Find the equations of tangent and normal to the parabola $x^2 = 8y$ at a point $(4, 2)$.	
OR		4

(ix)	Find the equation of tangent and normal to parabola $x^2 = 8y - 8$ at $x = 4$	04
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(ix)	Find the equations of tangent and normal to parabola $x^2 = -8y + 8$ at $x = 4$.	04
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(xii)	Find equations of tangent normal to $y^2 = 4ax$ at $(at^2, 2at)$	04
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OR	Find equations of the common tangents to the conics: $y^2 = 16x$ and $x^2 = 2y$	08
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(xi)	Find equation of tangent to $y^2 = 12x$ through the point $(1, 4)$	04
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OR	$\frac{x^2}{128} + \frac{y^2}{18} = 1$ which are parallel to the line $3x + 8y + 1 = 0$.	08
Also find the point of contact.		