

MATHEMATICS · JEE MAIN

Parabola

Chapter-wise previous year questions, with answer key

47

PYQS

2020–2025

PAPERS

5

TOPICS

Tangent and Normal

Standard Forms

Parametric Form

Reflection Property

Focal Chord

- 1 Attempt each question on paper first — they're grouped by topic, newest papers first.
- 2 Check yourself against the answer key at the end.
- 3 Got one wrong? Tap “Step-by-step solution” under it for the full working.

Stuck on a question?

Every question has a free step-by-step solution on PrepWiser — tap “Step-by-step solution” under it.

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Tangent and Normal · 27 PYQs

Q1 JEE Main 2024 · 5 Apr · Shift 2

Let a line perpendicular to the line $2x - y = 10$ touch the parabola $y^2 = 4(x - 9)$ at the point P. The distance of the point P from the centre of the circle $x^2 + y^2 - 14x - 8y + 56 = 0$ is _____.

Numerical answer — enter the value.

[Step-by-step solution ► prepwiser.in/questions/rX2XV9ICtP](https://www.prepwiser.in/questions/rX2XV9ICtP)

Q2 JEE Main 2024 · 27 Jan · Shift 1

If the shortest distance of the parabola $y^2 = 4x$ from the centre of the circle $x^2 + y^2 - 4x - 16y + 64 = 0$ is d , then d^2 is equal to :

- (A) 16 (B) 24
(C) 20 (D) 36

[Step-by-step solution ► prepwiser.in/questions/phHJqWH5rP](https://www.prepwiser.in/questions/phHJqWH5rP)

Q3 JEE Main 2023 · 10 Apr · Shift 1

Let a common tangent to the curves $y^2 = 4x$ and $(x - 4)^2 + y^2 = 16$ touch the curves at the points P and Q. Then $(PQ)^2$ is equal to _____.

Numerical answer — enter the value.

[Step-by-step solution ► prepwiser.in/questions/BInOmdayx5](https://www.prepwiser.in/questions/BInOmdayx5)

Q4 JEE Main 2023 · 8 Apr · Shift 2

The ordinates of the points P and Q on the parabola with focus $(3, 0)$ and directrix $x = -3$ are in the ratio $3 : 1$. If $R(\alpha, \beta)$ is the point of intersection of the tangents to the parabola at P and Q, then $\frac{\beta^2}{\alpha}$ is equal to _____.

Numerical answer — enter the value.

[Step-by-step solution ► prepwiser.in/questions/Hphvpuvckp](https://www.prepwiser.in/questions/Hphvpuvckp)

Q5 JEE Main 2023 · 6 Apr · Shift 1

Let the tangent to the curve $x^2 + 2x - 4y + 9 = 0$ at the point P(1, 3) on it meet the y -axis at A. Let the line passing through P and parallel to the line $x - 3y = 6$ meet the parabola $y^2 = 4x$ at B. If B lies on the line $2x - 3y = 8$, then $(AB)^2$ is equal to _____.

Numerical answer — enter the value.

[Step-by-step solution ► prepwiser.in/questions/teINf2CqOG](https://www.prepwiser.in/questions/teINf2CqOG)

Q6 JEE Main 2023 · 30 Jan · Shift 2

Let A be a point on the x -axis. Common tangents are drawn from A to the curves $x^2 + y^2 = 8$ and $y^2 = 16x$. If one of these tangents touches the two curves at Q and R, then $(QR)^2$ is equal to :

- (A) 76 (B) 81
(C) 64 (D) 72

[Step-by-step solution ► prepwiser.in/questions/nsK3LPkCh4](https://www.prepwiser.in/questions/nsK3LPkCh4)

Q7 JEE Main 2023 · 25 Jan · Shift 1

The distance of the point $(6, -2\sqrt{2})$ from the common tangent $y = mx + c$, $m > 0$, of the curves $x = 2y^2$ and $x = 1 + y^2$ is :

- (A) $\frac{1}{3}$ (B) 5
(C) $\frac{14}{3}$ (D) $5\sqrt{3}$

[Step-by-step solution ► prepwiser.in/questions/K6Sw0dfYhx](https://www.prepwiser.in/questions/K6Sw0dfYhx)

Q8 JEE Main 2022 · 28 Jul · Shift 2

Two tangent lines l_1 and l_2 are drawn from the point $(2, 0)$ to the parabola $2y^2 = -x$. If the lines l_1 and l_2 are also tangent to the circle $(x - 5)^2 + y^2 = r$, then $17r$ is equal to _____.

Numerical answer — enter the value.

[Step-by-step solution ► prepwiser.in/questions/79uGKgkEvE](https://www.prepwiser.in/questions/79uGKgkEvE)

Q9 JEE Main 2022 · 27 Jul · Shift 1

Let $P(a, b)$ be a point on the parabola $y^2 = 8x$ such that the tangent at P passes through the centre of the circle $x^2 + y^2 - 10x - 14y + 65 = 0$. Let A be the product of all possible values of a and B be the product of all possible values of b . Then the value of $A + B$ is equal to :

- (A) 0 (B) 25
(C) 40 (D) 65

[Step-by-step solution ► prepwiser.in/questions/gXUzd-av32](https://www.prepwiser.in/questions/gXUzd-av32)

Q10 JEE Main 2022 · 26 Jul · Shift 2

The equation of a common tangent to the parabolas $y = x^2$ and $y = -(x - 2)^2$ is

- (A) $y = 4(x - 2)$ (B) $y = 4(x - 1)$
(C) $y = 4(x + 1)$ (D) $y = 4(x + 2)$

[Step-by-step solution ► prepwiser.in/questions/12EEGHqPkP](https://www.prepwiser.in/questions/12EEGHqPkP)

Q11 JEE Main 2022 · 26 Jul · Shift 1

Let the function $f(x) = 2x^2 - \log_e x$, $x > 0$, be decreasing in $(0, a)$ and increasing in $(a, 4)$. A tangent to the parabola $y^2 = 4ax$ at a point P on it passes through the point $(8a, 8a - 1)$ but does not pass through the point $(-\frac{1}{a}, 0)$. If the equation of the normal at P is : $\frac{x}{\alpha} + \frac{y}{\beta} = 1$, then $\alpha + \beta$ is equal to _____.

Numerical answer — enter the value.

[Step-by-step solution ► prepwiser.in/questions/vwl2Fe-IY-](https://www.prepwiser.in/questions/vwl2Fe-IY-)

Q12 JEE Main 2022 · 26 Jun · Shift 1

Let the normal at the point on the parabola $y^2 = 6x$ pass through the point $(5, -8)$. If the tangent at P to the parabola intersects its directrix at the point Q , then the ordinate of the point Q is :

- (A) -3
(B) $-\frac{9}{4}$
(C) $-\frac{5}{2}$
(D) -2

[Step-by-step solution ► prepwiser.in/questions/EZ2WEJUZ15](https://www.prepwiser.in/questions/EZ2WEJUZ15)

Q13 JEE Main 2022 · 25 Jun · Shift 2

If the line $y = 4 + kx$, $k > 0$, is the tangent to the parabola $y = x - x^2$ at the point P and V is the vertex of the parabola, then the slope of the line through P and V is :

- (A) $\frac{3}{2}$ (B) $\frac{26}{9}$
(C) $\frac{5}{2}$ (D) $\frac{23}{6}$

Step-by-step solution ► [prepwisser.in/questions/ogqxcd_6Cw](https://www.prepwisser.in/questions/ogqxcd_6Cw)

Q14 JEE Main 2022 · 25 Jun · Shift 1

If $y = m_1x + c_1$ and $y = m_2x + c_2$, $m_1 \neq m_2$ are two common tangents of circle $x^2 + y^2 = 2$ and parabola $y^2 = x$, then the value of $8|m_1m_2|$ is equal to :

- (A) $3 + 4\sqrt{2}$ (B) $-5 + 6\sqrt{2}$
(C) $-4 + 3\sqrt{2}$ (D) $7 + 6\sqrt{2}$

Step-by-step solution ► [prepwisser.in/questions/xlymCjSp3o](https://www.prepwisser.in/questions/xlymCjSp3o)

Q15 JEE Main 2022 · 24 Jun · Shift 1

If two tangents drawn from a point (α, β) lying on the ellipse $25x^2 + 4y^2 = 1$ to the parabola $y^2 = 4x$ are such that the slope of one tangent is four times the other, then the value of $(10\alpha + 5)^2 + (16\beta^2 + 50)^2$ equals _____.

Numerical answer — enter the value.

Step-by-step solution ► [prepwisser.in/questions/ozaZnWaOCv](https://www.prepwisser.in/questions/ozaZnWaOCv)

Q16 JEE Main 2022 · 24 Jun · Shift 2

A particle is moving in the xy-plane along a curve C passing through the point (3, 3). The tangent to the curve C at the point P meets the x-axis at Q. If the y-axis bisects the segment PQ, then C is a parabola with :

- (A) length of latus rectum 3 (B) length of latus rectum 6
(C) focus $(\frac{4}{3}, 0)$ (D) focus $(0, \frac{3}{4})$

Step-by-step solution ► [prepwisser.in/questions/kuQULrwI_T](https://www.prepwisser.in/questions/kuQULrwI_T)

Q17 JEE Main 2021 · 31 Aug · Shift 2

A tangent line L is drawn at the point (2, -4) on the parabola $y^2 = 8x$. If the line L is also tangent to the circle $x^2 + y^2 = a$, then 'a' is equal to _____.

Numerical answer — enter the value.

Step-by-step solution ► [prepwisser.in/questions/20kFIkR31F](https://www.prepwisser.in/questions/20kFIkR31F)

Q18 JEE Main 2021 · 27 Aug · Shift 2

If two tangents drawn from a point P to the parabola $y^2 = 16(x - 3)$ are at right angles, then the locus of point P is :

- (A) $x + 3 = 0$ (B) $x + 1 = 0$
(C) $x + 2 = 0$ (D) $x + 4 = 0$

Step-by-step solution ► [prepwisser.in/questions/ymau0BWhyI](https://www.prepwisser.in/questions/ymau0BWhyI)

Q19 JEE Main 2021 · 27 Aug · Shift 1

A tangent and a normal are drawn at the point $P(2, -4)$ on the parabola $y^2 = 8x$, which meet the directrix of the parabola at the points A and B respectively. If $Q(a, b)$ is a point such that $AQBP$ is a square, then $2a + b$ is equal to :

- (A) -16 (B) -18
(C) -12 (D) -20

[Step-by-step solution ► prepwiser.in/questions/L1w4a483KS](https://www.prepwiser.in/questions/L1w4a483KS)

Q20 JEE Main 2021 · 22 Jul · Shift 2

Let a line $L : 2x + y = k$, $k > 0$ be a tangent to the hyperbola $x^2 - y^2 = 3$. If L is also a tangent to the parabola $y^2 = \alpha x$, then α is equal to :

- (A) 12 (B) -12
(C) 24 (D) -24

[Step-by-step solution ► prepwiser.in/questions/inXFhuhDuf](https://www.prepwiser.in/questions/inXFhuhDuf)

Q21 JEE Main 2021 · 16 Mar · Shift 1

If the three normals drawn to the parabola, $y^2 = 2x$ pass through the point $(a, 0)$ $a \neq 0$, then 'a' must be greater than :

- (A) $\frac{1}{2}$
(B) 1
(C) -1
(D) $-\frac{1}{2}$

[Step-by-step solution ► prepwiser.in/questions/070Qt0qT23](https://www.prepwiser.in/questions/070Qt0qT23)

Q22 JEE Main 2021 · 25 Feb · Shift 1

A tangent is drawn to the parabola $y^2 = 6x$ which is perpendicular to the line $2x + y = 1$. Which of the following points does NOT lie on it?

- (A) $(0, 3)$ (B) $(-6, 0)$
(C) $(4, 5)$ (D) $(5, 4)$

[Step-by-step solution ► prepwiser.in/questions/T74Yvh7zvr](https://www.prepwiser.in/questions/T74Yvh7zvr)

Q23 JEE Main 2021 · 24 Feb · Shift 2

For which of the following curves, the line $x + \sqrt{3}y = 2\sqrt{3}$ is the tangent at the point $\left(\frac{3\sqrt{3}}{2}, \frac{1}{2}\right)$?

- (A) $2x^2 - 18y^2 = 9$ (B) $y^2 = \frac{1}{6\sqrt{3}}x$
(C) $x^2 + 9y^2 = 9$ (D) $x^2 + y^2 = 7$

[Step-by-step solution ► prepwiser.in/questions/3NjoZNS4YD](https://www.prepwiser.in/questions/3NjoZNS4YD)

Q24 JEE Main 2020 · 6 Sep · Shift 1

Let L_1 be a tangent to the parabola $y^2 = 4(x + 1)$

and L_2 be a tangent to the parabola $y^2 = 8(x + 2)$

such that L_1 and L_2 intersect at right angles. Then L_1 and L_2 meet on the straight line :

(A) $x + 3 = 0$

(B) $x + 2y = 0$

(C) $x + 2 = 0$

(D) $2x + 1 = 0$

[Step-by-step solution ► prepwiser.in/questions/0QLrTWPRUH](https://www.prepwiser.in/questions/0QLrTWPRUH)

Q25 JEE Main 2020 · 5 Sep · Shift 1

If the common tangent to the parabolas,

$y^2 = 4x$ and $x^2 = 4y$ also touches the circle, $x^2 + y^2 = c^2$,

then c is equal to :

(A) $\frac{1}{\sqrt{2}}$

(B) $\frac{1}{2\sqrt{2}}$

(C) $\frac{1}{2}$

(D) $\frac{1}{4}$

[Step-by-step solution ► prepwiser.in/questions/z7hbjAb2Gr](https://www.prepwiser.in/questions/z7hbjAb2Gr)

Q26 JEE Main 2020 · 5 Sep · Shift 2

If the lines $x + y = a$ and $x - y = b$ touch the

curve $y = x^2 - 3x + 2$ at the points where the curve intersects the x -axis, then $\frac{a}{b}$ is equal to _____.

Numerical answer — enter the value.

[Step-by-step solution ► prepwiser.in/questions/5lIBx_uIWZ](https://www.prepwiser.in/questions/5lIBx_uIWZ)

Q27 JEE Main 2020 · 7 Jan · Shift 1

If $y = mx + 4$ is a tangent to both the parabolas, $y^2 = 4x$ and $x^2 = 2by$, then b is equal to :

(A) -128

(B) 128

(C) -64

(D) -32

[Step-by-step solution ► prepwiser.in/questions/stsaqIUGcx](https://www.prepwiser.in/questions/stsaqIUGcx)

Standard Forms · 10 PYQs

Q28 JEE Main 2025 · 24 Jan · Shift 2

If the equation of the parabola with vertex $V\left(\frac{3}{2}, 3\right)$ and the directrix $x + 2y = 0$ is $\alpha x^2 + \beta y^2 - \gamma xy - 30x - 60y + 225 = 0$, then $\alpha + \beta + \gamma$ is equal to :

(A) 6

(B) 8

(C) 7

(D) 9

[Step-by-step solution ► prepwiser.in/questions/DpYlReWYR5](https://www.prepwiser.in/questions/DpYlReWYR5)

Q29 JEE Main 2025 · 22 Jan · Shift 1

Let the parabola $y = x^2 + px - 3$, meet the coordinate axes at the points P, Q and R. If the circle C with centre at $(-1, -1)$ passes through the points P, Q and R, then the area of $\triangle PQR$ is :

- (A) 4 (B) 6
(C) 5 (D) 7

[Step-by-step solution ► prepwisser.in/questions/hRS8dqacfd](https://www.prepwisser.in/questions/hRS8dqacfd)

Q30 JEE Main 2024 · 6 Apr · Shift 1

Let a conic C pass through the point $(4, -2)$ and $P(x, y)$, $x \geq 3$, be any point on C . Let the slope of the line touching the conic C only at a single point P be half the slope of the line joining the points P and $(3, -5)$. If the focal distance of the point $(7, 1)$ on C is d , then $12d$ equals _____.

Numerical answer — enter the value.

[Step-by-step solution ► prepwisser.in/questions/di1udBGE4i](https://www.prepwisser.in/questions/di1udBGE4i)

Q31 JEE Main 2024 · 4 Apr · Shift 2

Let PQ be a chord of the parabola $y^2 = 12x$ and the midpoint of PQ be at $(4, 1)$. Then, which of the following point lies on the line passing through the points P and Q ?

- (A) $(3, -3)$ (B) $(\frac{1}{2}, -20)$
(C) $(2, -9)$ (D) $(\frac{3}{2}, -16)$

[Step-by-step solution ► prepwisser.in/questions/on_wjmRPCx](https://www.prepwisser.in/questions/on_wjmRPCx)

Q32 JEE Main 2023 · 30 Jan · Shift 2

The parabolas : $ax^2 + 2bx + cy = 0$ and $dx^2 + 2ex + fy = 0$ intersect on the line $y = 1$. If a, b, c, d, e, f are positive real numbers and a, b, c are in G.P., then :

- (A) $\frac{d}{a}, \frac{e}{b}, \frac{f}{c}$ are in A.P.
(B) $\frac{d}{a}, \frac{e}{b}, \frac{f}{c}$ are in G.P.
(C) d, e, f are in A.P.
(D) d, e, f are in G.P.

[Step-by-step solution ► prepwisser.in/questions/bURTZXFr-O](https://www.prepwisser.in/questions/bURTZXFr-O)

Q33 JEE Main 2023 · 30 Jan · Shift 1

If $P(h, k)$ be a point on the parabola $x = 4y^2$, which is nearest to the point $Q(0, 33)$, then the distance of P from the directrix of the parabola $y^2 = 4(x + y)$ is equal to :

- (A) 8 (B) 2
(C) 6 (D) 4

[Step-by-step solution ► prepwisser.in/questions/RIPCegKvVx](https://www.prepwisser.in/questions/RIPCegKvVx)

Q34 JEE Main 2022 · 28 Jul · Shift 2

Let the hyperbola $H : \frac{x^2}{a^2} - \frac{y^2}{b^2} = 1$ pass through the point $(2\sqrt{2}, -2\sqrt{2})$. A parabola is drawn whose focus is same as the focus of H with positive abscissa and the directrix of the parabola passes through the other focus of H. If the length of the latus rectum of the parabola is e times the length of the latus rectum of H, where e is the eccentricity of H, then which of the following points lies on the parabola?

- (A) $(2\sqrt{3}, 3\sqrt{2})$ (B) $(3\sqrt{3}, -6\sqrt{2})$
(C) $(\sqrt{3}, -\sqrt{6})$ (D) $(3\sqrt{6}, 6\sqrt{2})$

Step-by-step solution ► [prepwiser.in/questions/mbANaoDEGL](https://www.prepwiser.in/questions/mbANaoDEGL)

Q35 JEE Main 2022 · 27 Jul · Shift 2

If the length of the latus rectum of a parabola, whose focus is (a, a) and the tangent at its vertex is $x + y = a$, is 16, then $|a|$ is equal to :

- (A) $2\sqrt{2}$ (B) $2\sqrt{3}$
(C) $4\sqrt{2}$ (D) 4

Step-by-step solution ► [prepwiser.in/questions/pUYPiXBtvA](https://www.prepwiser.in/questions/pUYPiXBtvA)

Q36 JEE Main 2022 · 28 Jun · Shift 2

If vertex of a parabola is $(2, -1)$ and the equation of its directrix is $4x - 3y = 21$, then the length of its latus rectum is :

- (A) 2 (B) 8
(C) 12 (D) 16

Step-by-step solution ► [prepwiser.in/questions/bl0Q9UevUU](https://www.prepwiser.in/questions/bl0Q9UevUU)

Q37 JEE Main 2022 · 27 Jun · Shift 2

If the equation of the parabola, whose vertex is at $(5, 4)$ and the directrix is $3x + y - 29 = 0$, is $x^2 + ay^2 + bxy + cx + dy + k = 0$, then $a + b + c + d + k$ is equal to :

- (A) 575 (B) -575
(C) 576 (D) -576

Step-by-step solution ► [prepwiser.in/questions/nTY63-luB5](https://www.prepwiser.in/questions/nTY63-luB5)

Parametric Form · 3 PYQs

Q38 JEE Main 2024 · 29 Jan · Shift 2

Let $P(\alpha, \beta)$ be a point on the parabola $y^2 = 4x$. If P also lies on the chord of the parabola $x^2 = 8y$ whose mid point is $(1, \frac{5}{4})$, then $(\alpha - 28)(\beta - 8)$ is equal to _____.

Numerical answer — enter the value.

Step-by-step solution ► [prepwiser.in/questions/AA6Td8X00d](https://www.prepwiser.in/questions/AA6Td8X00d)

Q39 JEE Main 2023 · 8 Apr · Shift 1

Let R be the focus of the parabola $y^2 = 20x$ and the line $y = mx + c$ intersect the parabola at two points P and Q .

Let the point $G(10, 10)$ be the centroid of the triangle PQR . If $c - m = 6$, then $(PQ)^2$ is :

- (A) 317 (B) 325
(C) 346 (D) 296

[Step-by-step solution ► prepwisar.in/questions/6yOOh8JAeu](https://www.prepwisar.in/questions/6yOOh8JAeu)

Q40 JEE Main 2022 · 25 Jun · Shift 1

Let $x = 2t, y = \frac{t^2}{3}$ be a conic. Let S be the focus and B be the point on the axis of the conic such that $SA \perp BA$, where A is any point on the conic. If k is the ordinate of the centroid of the $\triangle SAB$, then $\lim_{t \rightarrow 1} k$ is equal to :

- (A) $\frac{17}{18}$ (B) $\frac{19}{18}$
(C) $\frac{11}{18}$ (D) $\frac{13}{18}$

[Step-by-step solution ► prepwisar.in/questions/FgpdZxQr4T](https://www.prepwisar.in/questions/FgpdZxQr4T)

Reflection Property · 1 PYQs

Q41 JEE Main 2022 · 24 Jun · Shift 2

Let P_1 be a parabola with vertex $(3, 2)$ and focus $(4, 4)$ and P_2 be its mirror image with respect to the line $x + 2y = 6$. Then the directrix of P_2 is $x + 2y = \underline{\hspace{2cm}}$.

Numerical answer — enter the value.

[Step-by-step solution ► prepwisar.in/questions/0G2pnAqS8g](https://www.prepwisar.in/questions/0G2pnAqS8g)

Focal Chord · 6 PYQs

Q42 JEE Main 2025 · 2 Apr · Shift 2

Let the point P of the focal chord PQ of the parabola $y^2 = 16x$ be $(1, -4)$. If the focus of the parabola divides the chord PQ in the ratio $m : n$, $\gcd(m, n) = 1$, then $m^2 + n^2$ is equal to :

- (A) 17 (B) 37
(C) 10 (D) 26

[Step-by-step solution ► prepwisar.in/questions/yYqMSbQBBA](https://www.prepwisar.in/questions/yYqMSbQBBA)

Q43 JEE Main 2025 · 29 Jan · Shift 2

Let $y^2 = 12x$ be the parabola and S be its focus. Let PQ be a focal chord of the parabola such that $(SP)(SQ) = \frac{147}{4}$. Let C be the circle described taking PQ as a diameter. If the equation of a circle C is $64x^2 + 64y^2 - \alpha x - 64\sqrt{3}y = \beta$, then $\beta - \alpha$ is equal to .

Numerical answer — enter the value.

[Step-by-step solution ► prepwisar.in/questions/eCSiVspInE](https://www.prepwisar.in/questions/eCSiVspInE)

Q44 JEE Main 2024 · 5 Apr · Shift 1

Suppose AB is a focal chord of the parabola $y^2 = 12x$ of length l and slope $m < \sqrt{3}$. If the distance of the chord AB from the origin is d , then ld^2 is equal to _____.

Numerical answer — enter the value.

[Step-by-step solution ► prepwiser.in/questions/V9BDFud_IB](https://www.prepwiser.in/questions/V9BDFud_IB)

Q45 JEE Main 2023 · 1 Feb · Shift 2

If the x -intercept of a focal chord of the parabola $y^2 = 8x + 4y + 4$ is 3, then the length of this chord is equal to _____.

Numerical answer — enter the value.

[Step-by-step solution ► prepwiser.in/questions/THsXyD1ipy](https://www.prepwiser.in/questions/THsXyD1ipy)

Q46 JEE Main 2021 · 20 Jul · Shift 1

Let $y = mx + c$, $m > 0$ be the focal chord of $y^2 = -64x$, which is tangent to $(x + 10)^2 + y^2 = 4$. Then, the value of $4\sqrt{2}(m + c)$ is equal to _____.

Numerical answer — enter the value.

[Step-by-step solution ► prepwiser.in/questions/gT5Gqn2tfh](https://www.prepwiser.in/questions/gT5Gqn2tfh)

Q47 JEE Main 2020 · 9 Jan · Shift 2

If one end of a focal chord AB of the parabola $y^2 = 8x$ is at $A\left(\frac{1}{2}, -2\right)$, then the equation of the tangent to it at B is :

(A) $2x - y - 24 = 0$

(B) $x - 2y + 8 = 0$

(C) $x + 2y + 8 = 0$

(D) $2x + y - 24 = 0$

[Step-by-step solution ► prepwiser.in/questions/5p2gGCaIOX](https://www.prepwiser.in/questions/5p2gGCaIOX)

Answer key — Parabola

Numbers match the question numbers above. For full working, open the solution link under each question.

1	10	2	C	3	32	4	16	5	292	6	D	7	B	8	9
9	D	10	B	11	45	12	B	13	C	14	C	15	2929	16	A
17	2	18	B	19	A	20	D	21	B	22	D	23	C	24	A
25	A	26	0	27	A	28	D	29	B	30	75	31	B	32	A
33	C	34	B	35	C	36	B	37	D	38	192	39	B	40	D
41	10	42	A	43	1328	44	108	45	16	46	34	47	B		

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