



MATHS

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MATHS (KANNADA ENGLISH)

ELLIPSE

Level I Mcq

1. If question of the ellipse whose focus is $(1,-1)$, then directrix the line $x-y-3=0$ and eccentricity

$\frac{1}{2}$ is

A. $7x^2 + 2xy + 7y^2 - 10x + 10y + 7 = 0$

B. $7x^2 + 2xy + 7y^2 + 7 = 0$

C. $7x^2 + 2xy + 7y^2 + 10x - 10y - 7 = 0$

D. None of these

Answer: A



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2. The length of the latus rectum of the ellipse

$$3x^2 + y^2 = 12 \text{ is :}$$

A. 4

B. 3

C. 8

D. $\frac{4}{\sqrt{3}}$

Answer: D



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3. If e' is the eccentricity of the ellipse

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1 \quad (a > b), \text{ then}$$

A. $b^2 = a^2(1 - e^2)$

B. $a^2 = b^2(1 - e^2)$

C. $a^2 = b^2(e^2 - 1)$

D. $b^2 = a^2(e^2 - 1)$

Answer: B



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4. Find the equation of the ellipse which passes through the points (3,1) and (2,2).

A. $5x^2 + 3y^2 = 32$

B. $3x^2 + 5y^2 = 32$

C. $5x^2 - 3y^2 = 32$

D. $3x^2 + 5y^2 + 32 = 0$

Answer: B



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5. The eccentricity of the ellipse

$$25x^2 + 16y^2 - 150x - 175 = 0 \text{ is}$$

A. $\frac{5}{6}$

B. $\frac{2}{5}$

C. $\frac{\sqrt{2}}{3}$

D. $\frac{3}{5}$

Answer: D



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6. Find the foci of the ellipse

$$25(x + 1)^2 + 9(y + 2)^2 = 225.$$

A. $(-2, 1)$ and $(-2, 6)$

B. $(-1, 2)$ and $(-1, -6)$

C. $(-1, -2)$ and $(-2, -1)$

D. $(-1, -2)$ and $(-1, -6)$

Answer: B



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7. The length of the latus rectum of the ellipse

$$5x^2 + 9y^2 = 45 \text{ is}$$

A. $\frac{10}{3}$

B. $\frac{5}{3}$

C. $\frac{2\sqrt{5}}{3}$

D. $\frac{\sqrt{5}}{3}$

Answer: A



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8. A circle is a limiting case of an ellipse whose eccentricity :

A. tends to 0

B. tends to a

C. tends to b

D. None of these

Answer: A



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9. The equation $\frac{x^2}{2-r} + \frac{y^2}{r-5} + 1 = 0$ represents an ellipse, if

A. $r > 5$

B. $2 < r < 5$

C. $r < 2$

D. none of these

Answer: B



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10. The equation $\frac{x^2}{1-r} + \frac{y^2}{r-3} + 1 = 0$

represents an ellipse if :

A. $r > 1$

B. $r > 3$

C. $1 < r < 3$

D. None of these

Answer: C



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11. Sum of focal distances of an ellipse

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1 \text{ is :}$$

A. $2a$

B. $2b$

C. $a + b$

D. None of these

Answer: A



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12. If F_1 is $(3, 0)$ and F_2 is $(-3, 0)$ and P is any point on the ellipse $\frac{x^2}{25} + \frac{y^2}{16} = 1$, then $|PF_1| + |PF_2|$ equals :

A. 6

B. 8

C. 10

D. 12

Answer: C



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13. Let F_1 and F_2 be the points $(0, -4)$ and $(0, 4)$. The locus of the point P such that $|PF_1| + |PF_2| = 6$ is :

A. an ellipse

B. the segment $[F_1F_2]$

C. the st. line containing F_1 and F_2

D. None of these

Answer: D



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14. The foci of an ellipse are $(0, \pm 1)$ and minor axis is of unit length. Then the equation of the ellipse is :

A. $2x^2 + y^2 = 2$

B. $x^2 + 2y^2 = 2$

C. $4x^2 + 20y^2 = 5$

D. $20x^2 + 4y^2 = 5$

Answer: D



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15. The equation of the ellipse with foci at $(\pm 3, 0)$ and vertices $(\pm 5, 0)$ is :

A. $\frac{x^2}{25} + \frac{y^2}{9} = 1$

B. $\frac{x^2}{25} + \frac{y^2}{16} = 1$

C. $\frac{x^2}{16} + \frac{y^2}{25} = 1$

D. None of these

Answer: B



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16. Equation of the ellipse whose focus is

(6, 7) directrix is

$$x + y + 2 = 0 \text{ and } e = \frac{1}{\sqrt{3}} \text{ is-}$$

A.

$$5x^2 - 2xy + 5y^2 + 76x + 88y - 506 = 0$$

B.

$$5x^2 - 2xy + 5y^2 - 76x - 88y + 506 = 0$$

C.

$$5x^2 + 2xy + 5y^2 - 76x - 88y + 506 = 0$$

D.

$$5x^2 + 2xy + 5y^2 + 76x + 88y + 506 = 0$$

Answer: B



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17. The curve represented by

$$x = 3(\cos t + \sin t), y = 4(\cos t - \sin t), \text{ is}$$

A. a circle

B. a parabola

C. an ellipse

D. a hyperbola

Answer: C



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18. The equations of tangents to the ellipse

$9x^2 + 16y^2 = 144$ from the point (2,3) are:

A. $y = 3, x = 5$

B. $y = 3, x = 2$

C. $y = 2, x = 3$

D. $y = 3, x + y = 5$

Answer: D



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19. The number of real tangents that can be drawn to the ellipses $3x^2 + 5y^2 = 32$ and $25x^2 + 9y^2 = 450$, passes through $(3, 5)$, is

A. 0

B. 2

C. 3

D. 4

Answer: C



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20. The line $y = mx + c$ is a normal to the

ellipse $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$, if c

A. $c = \frac{a^2 m}{b^2}$

B. $c^2 = a^2m^2 + b^2$

C. $c^2 = a^2m^2 - b^2$

D. None of these

Answer: B



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21. The equation,

$$2x^2 + 3y^2 - 8x - 18y + 35 = K \text{ represents}$$

A. a point if $k = 0$

B. no locus if $k > 0$

C. an ellipse if $k < 0$

D. None of these

Answer: A



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22. The equations of tangents to the ellipse

$9x^2 + 16y^2 = 144$ from the point (2,3) are:

A. 3

B. 4

C. $3/2$

D. None of these

Answer: B



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23.

if

$P = (x, y)$, $F_1 = (3, 0)$, $F_2 = (-3, 0)$, and

$16x^2 + 25y^2 = 400$, then $PF_1 + PF_2$ equal 8

(b) 6 (c) 10 (d) 12

A. 8

B. 6

C. 10

D. 12

Answer: C



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24. The number of values of c such that the straight line $y = 4x + c$ touches the curve

$$\frac{x^2}{4} + \frac{y^2}{1} = 1 \text{ is 0 (b) 1 (c) 2 (d) infinite}$$

A. 0

B. 1

C. 2

D. infinite

Answer: C



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25. Chords of the ellipse $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ are drawn through the positive end of the minor axis. Then prove that their midpoints lie on the ellipse.

- A. a circle
- B. a parabola
- C. an ellipse
- D. a hyperbola

Answer: C



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26. the centre of the ellipse

$$\frac{(x + y - 2)^2}{9} + \frac{(x - y)^2}{16} = 1, \text{ is}$$

A. (0, 0)

B. (1, 1)

C. (1, 0)

D. (0, 1)

Answer: B



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27. The radius of the circle passing through the foci of the ellipse $\frac{x^2}{16} + \frac{y^2}{9}$ and having its center (0, 3) is 4 (b) 3 (c) $\sqrt{12}$ (d) $\frac{7}{2}$

A. 4

B. 3

C. $\sqrt{12}$

D. $\frac{7}{2}$

Answer: A



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28. The equation to the ellipse whose foci are $(\pm 2, 0)$ and eccentricity $\frac{1}{2}$ is :

A. $\frac{x^2}{12} + \frac{y^2}{16} = 1$

B. $\frac{x^2}{16} + \frac{y^2}{12} = 1$

C. $\frac{x^2}{16} + \frac{y^2}{8} = 1$

D. None of these

Answer: B



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29. Tangents are drawn to the ellipse

$$\frac{x^2}{9} + \frac{y^2}{5} = 1 \text{ at the end of latus rectum. Find}$$

the area of quadrilateral so formed

A. 27

B. $27/2$

C. $27/4$

D. $27/5$

Answer: A



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30. The eccentricity of an ellipse with its centre at the origin is $\frac{1}{2}$. If one of the directrices is $x = 4$, then the equation of ellipse is

A. $3x^2 + 4y^2 = 1$

B. $3x^2 + 4y^2 = 12$

C. $4x^2 + 3y^2 = 12$

D. $4x^2 + 3y^2 = 1$

Answer: B



Level Ii Mcq

1. Let P be a variable point on the ellipse $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ with foci S_1 and S_2 . If A be the area of the triangle PS_1S_2 , then the maximum value of A is :

A. ab

B. abe

C. e

D. None of these

Answer: B



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2. If the normal at any point P on the ellipse

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$$
 meets the axes at G and g ,

respectively, then find the ratio $PG : Pg$.

A. $b : a$

B. $b^2 : a^2$

C. $a : b$

D. none of these

Answer: B



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3. the equation of the circle passing through the foci of the ellipse $\frac{x^2}{16} + \frac{y^2}{9} = 1$ and having centre at (0,3) is

A. 3

B. 5

C. 4

D. None of these

Answer: C



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4. P is a variable on the ellipse $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ with ∇' as the major axis. Find the maximum area of triangle APA'

A. $\frac{1}{2}ab$

B. $2ab$

C. ab

D. none of these

Answer: C



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5. if the tangent at the point

$\left(4 \cos \phi, \frac{16}{\sqrt{11}} \sin \phi\right)$ to the ellipse

$16x^2 + 11y^2 = 256$ is also a tangent to the circle $x^2 + y^2 - 2x = 15$, then the value of ϕ is

A. $\pm \pi / 3$

B. $\pm \pi / 4$

C. $\pm \pi / 2$

D. None of these

Answer: A



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6. If a tangent of slope m' at a point of the ellipse passes through $(2a, 0)$ and if e denotes the eccentricity of the ellipse then (A) $m^2 + e^2 = 1$ (C) $3m^2 + e^2 = 1$ (B) $2m^2 + e^2 = 1$ (D) none of these

A. $m^2 + e^2 = 1$

B. $2m^2 + e^2 = 1$

C. $3m^2 + e^2 = 1$

D. None of these

Answer: C



7. The normal at an end of a latus rectum of the ellipse $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ passes through an end of the minor axis if

A. $e^2 + e - 1 = 0$

B. $e^3 + e - 1 = 0$

C. $e^3 + e^2 - 1 = 0$

D. $e^4 + e^2 - 1 = 0$

Answer: D



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8. Let E be the ellipse $\frac{x^2}{9} + \frac{y^2}{4} = 1$ and C be the circle $x^2 + y^2 = 9$. Let P and Q be the points (1,2) and (2,1) respectively. Then

- A. Q lies inside C but outside E
- B. Q lies outside both C and E
- C. P lies inside both C and E
- D. P lies inside C but outside E

Answer: D



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9. The eccentricity of an ellipse whose pair of a conjugate diameter are $y = x$ and $3y = -2x$ is (A) $\frac{2}{3}$ (B) $\frac{1}{3}$ (C) $\frac{1}{\sqrt{3}}$ (D) none

A. $\frac{1}{\sqrt{3}}$

B. $\frac{1}{3}$

C. $\frac{2}{3}$

D. None of these

Answer: D



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10. An ellipse has OB as a semi-minor axis. S_1, S_2 are its foci and the angle S_1BS_2 is a right-angle, then the eccentricity of the ellipse is :

A. $\frac{1}{\sqrt{2}}$

B. $\frac{1}{\sqrt{3}}$

C. $\frac{2}{3}$

D. None of these

Answer: A



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11. The equation of the auxiliary circle of the ellipse :

$9x^2 + 4y^2 - 8y - 32 = 0$ is :

A. $x^2 + y^2 - 2y - 8 = 0$

B. $x^2 + y^2 - 8y + 7 = 0$

C. $x^2 + y^2 - 4x - 5 = 0$

D. None of these

Answer: A



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12. The equation of the director circle of the ellipse $x^2 + 2y^2 + 2x - 12y + 15 = 0$ is :

A. $x^2 + y^2 + 2x - 6y - 4 = 0$

B. $x^2 + y^2 + 2x - 6y + 4 = 0$

C. $x^2 + y^2 + 2x - 12y + 4 = 0$

D. $x^2 + y^2 + 2x - 12y - 4 = 0$

Answer: B



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13. A man running around a race course notes that the sum of the distances of two flagposts from him is always 10m and the distance

between the flag posts is 8m. Then the area of the path he encloses in square meters is 15π

(b) 20π (c) 27π (d) 30π

A. 8π

B. 12π

C. 18π

D. 15π

Answer: D



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14. If the focal distance of an end of the minor axis of an ellipse (referred to its axes as the axes of x and y , respectively) is k and the distance between its foci is $2h$, then find its equation.

A. $\frac{x^2}{k^2} + \frac{y^2}{k^2 + h^2} = 1$

B. $\frac{x^2}{k^2} + \frac{y^2}{h^2 - k^2} = 1$

C. $\frac{x^2}{k^2} + \frac{y^2}{k^2 - h^2} = 1$

D. $\frac{x^2}{k^2} + \frac{y^2}{h^2} = 1$

Answer: C



15. A tangent at any point on the ellipse

$\frac{x^2}{9} + \frac{y^2}{4} = 1$ is cut by the tangents at the

extremities of the major axis at T_1 and T_2 .

The circle on T_1T_2 as diameter passes through

the point :

A. $(2, 1)$

B. $(\sqrt{5}, 0)$

C. $(0, \sqrt{5})$

D. $(0, -\sqrt{5})$

Answer: B



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16. If $y = x$ and $2x + 3y = 0$ are equations of a pair of conjugate diameters of an ellipse, then its eccentricity is :

A. $\frac{1}{\sqrt{3}}$

B. $\frac{1}{\sqrt{2}}$

C. $\sqrt{\frac{2}{3}}$

D. $\frac{2}{\sqrt{5}}$

Answer: A



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17. If chord of contact of the tangents drawn from the point (α, β) to the ellipse $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$, touches the circle $x^2 + y^2 = c^2$, then the locus of the point

A. $c^2(a^4x^2 + b^4y^2) = a^4b^4$

B. $c^2(a^4y^2 + b^4x^2) = a^4b^4$

C. $c^2(a^4y^2 + b^4x^2 - a^3b^3) = a^4b^4$

D. None of these

Answer: B



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18. If the polar of $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ is always touching the ellipse $\frac{x^2}{b^2} + \frac{y^2}{a^2} = 1$, then the locus of the polar is :

A. a circle

B. a parabola

C. an ellipse

D. a hyperbola

Answer: C



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19. S_1 and S_2 are the foci of the ellipse

$$\frac{x^2}{\sin^2 \alpha} + \frac{y^2}{\cos^2 \alpha} = 1 \left(\alpha \in \left(0, \frac{\pi}{4} \right) \right) \text{ and } P$$

is the point on the ellipse, then perimeter of

triangle PS_1S_2 is

A. $(1 + e)x^2 + (1 - e)y^2 = a^2e^2$

B. $(1 - e)x^2 + (1 + e)y^2 = a^2$

C. $(1 - e)x^2 + (1 + e)y^2 = a^2e^2$

D. $(1 + e)x^2 + (1 - e)y^2 = a^2$

Answer: C



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20. Suppose S and S' are foci of the ellipse

$\frac{x^2}{25} + \frac{y^2}{16} = 1$. If P is a variable point on the

ellipse and if Δ is the area (in sq. units) of the triangle PSS' then the maximum value of Δ is double of

A. 8

B. 12

C. 16

D. 20

Answer: B



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21. If the foci of the ellipse $\frac{x^2}{16} + \frac{y^2}{b^2} = 1$ and the hyperbola $\frac{x^2}{144} - \frac{y^2}{81} = \frac{1}{25}$ coincide write the value of b^2 .

A. 1

B. 5

C. 7

D. 9

Answer: C



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22. If $\tan \alpha \tan \beta = -\frac{a^2}{b^2}$, then the chord joining the points ' α ' and ' β ' on the ellipse $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ will subtend a right angle at the :

- A. centre
- B. focus
- C. end of major axis
- D. end of minor axis

Answer: A



23. Find the equation of the normal to the ellipse $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ at the positive end of the latus rectum.

A. $x - ey - e^3a = 0$

B. $x + ey + e^3a = 0$

C. $x - ey - e^2a = 0$

D. None of these

Answer: A



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24. if tangents are drawn to the ellipse $x^2 + 2y^2 = 2$ all points on the ellipse other its four vertices then the mid-points of the tangents intercepted between the coordinate axis lie on the curve

A. $\frac{1}{2x^2} + \frac{1}{4y^2} = 1$

B. $\frac{1}{4x^2} + \frac{1}{2y^2} = 1$

C. $\frac{x^2}{2} + \frac{y^2}{4} = 1$

D. $\frac{x^2}{4} + \frac{y^2}{2} = 1$

Answer: A



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25. Area of the greatest rectangle that can be

inscribed in the ellipse $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ is :

A. ab

B. $2ab$

C. $\frac{a}{b}$

D. \sqrt{ab}

Answer: B



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26. An ellipse has OB as the semi-minor axis, F and F' as its foci, and $\angle FBF'$ a right angle.

Then, find the eccentricity of the ellipse.

A. $\frac{1}{2}$

B. $\frac{1}{\sqrt{2}}$

C. $\frac{1}{\sqrt{3}}$

D. $\frac{1}{4}$

Answer: B



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27. A focus of an ellipse is at the origin. The directrix is the line $x = 4$ and the eccentricity is $\frac{1}{2}$. Then the length of the semi-major axis is

A. $\frac{5}{3}$

B. $\frac{8}{3}$

C. $\frac{2}{3}$

D. $\frac{4}{3}$

Answer: B



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28. The ellipse $x^2 + 4y^2 = 4$ is inscribed in a rectangle aligned with the coordinate axes, which in turn is inscribed in another ellipse that passes through the point $(4, 0)$. Then the equation of the ellipse is (1) $x^2 + 16y^2 = 16$ (2) $x^2 + 12y^2 = 16$ (3) $4x^2 + 48y^2 = 48$ (4) $4x^2 + 64y^2 = 48$

A. $x^2 + 16y^2 = 16$

B. $x^2 + 12y^2 = 16$

C. $4x^2 + 48y^2 = 48$

D. $4x^2 + 64y^2 = 48$

Answer: C



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29. If the locus of the middle point of the portion of a tangent of the ellipse

$\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ included between the axes is
 $\left(\frac{a^2}{x^2}\right) + \left(\frac{b^2}{y^2}\right) = k$, then the value of k is

A. $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 4$

B. $b^2x^2 + a^2y^2 = 4$

C. $a^2x^2 + b^2y^2 = 4$

D. $\frac{a^2}{x^2} + \frac{b^2}{y^2} = 4$

Answer: D



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30. In a model, it is shown that an arc of a bridge is semi-elliptical having major axis horizontal. If the length of the base is 9 m and the highest point of the bridge is 3 m from the horizontal , the best approximation of the height of the arch, 2 m from the centre of the base is approximately :

A. 2 m

B. $\frac{8}{3}m$

C. $\frac{7}{2}m$

D. $\frac{11}{4}m$

Answer: B



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31. A tangent is drawn at the point $(3\sqrt{3}\cos\theta, \sin\theta)$ for $0 < \theta < \frac{\pi}{2}$ of an ellipse $\frac{x^2}{27} + y^2 = 1$. The least value of the sum of the intercepts on the coordinate axes by this tangent is attained at θ equal to

A. $\frac{\pi}{6}$

B. $\frac{2\pi}{3}$

C. $\frac{3\pi}{8}$

D. $\frac{3\pi}{4}$

Answer: A



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32. If $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ is an ellipse and tangent at any point cuts the co-ordinate axes at P and Q, then the minimum area of triangle OPQ is :

A. ab

B. $\frac{a^2 + b^2}{2}$

C. $\frac{a^2 - b^2}{2}$

D. $\frac{1}{2}ab$

Answer: A



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33. The line passing through the extremity A of the major axis and extremity B of the minor axis of the ellipse $x^2 + 9y^2 = 9$ meets the

auxiliary circle at the point M . Then the area of the triangle with vertices at A , M , and O (the origin) is

A. $\frac{31}{10}$

B. $\frac{29}{10}$

C. $\frac{21}{10}$

D. $\frac{27}{10}$

Answer: D



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34. The normal at a point P on the ellipse $x^2 + 4y^2 = 16$ meets the x-axis at Q. If M is the mid-point of the line segment PQ, then the locus of M intersects the latus-rectum of the given ellipse at the points :

A. $\left(\pm \frac{3\sqrt{5}}{2}, \pm \frac{2}{7} \right)$

B. $\left(\pm \frac{3\sqrt{5}}{2}, \pm \frac{\sqrt{19}}{4} \right)$

C. $\left(\pm 2\sqrt{3}, \pm \frac{1}{7} \right)$

D. $\left(\pm 2\sqrt{3}, \pm \frac{4\sqrt{3}}{7} \right)$

Answer: C



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1. Equation of the ellipse whose axes are the axes of co-ordinates and which passes through the point $(-3, 1)$ and has eccentricity $\sqrt{2/5}$ is :

A. $3x^2 + 5y^2 - 32 = 0$

B. $5x^2 + 3y^2 - 48 = 0$

$$C. 3x^2 + 5y^2 - 15 = 0$$

$$D. 5x^2 + 3y^2 - 32 = 0$$

Answer: A



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2. An ellipse is drawn by taking the diameter of the circle $(x - 1)^2 + y^2 = 1$ as semi-minor axis and a diameter of the circle $x^2 + (y - 2)^2 = 4$ as its semi-major axis. If the centre of the ellipse is the origin and its

axes are the co-ordinate axes, then the equation of the ellipse is :

A. $4x^2 + y^2 = 4$

B. $x^2 + 4y^2 = 8$

C. $4x^2 + y^2 = 8$

D. $x^2 + 4y^2 = 16$

Answer: D



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3. The equation of the circle passing through the foci of the ellipse $\frac{x^2}{16} + \frac{y^2}{9} = 1$, and having centre $(0, 3)$ is :

A. $x^2 + y^2 - 6y + 7 = 0$

B. $x^2 + y^2 - 6y - 5 = 0$

C. $x^2 + y^2 - 6y + 5 = 0$

D. $x^2 + y^2 - 6y - 7 = 0$

Answer: D



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4. The locus of the foot of perpendicular drawn from the centre of the ellipse $x^2 + 3y^2 = 6$ on any tangent to it is :

A. $(x^2 - y^2)^2 = 6x^2 - 2y^2$

B. $(x^2 + y^2)^2 = 6x^2 + 2y^2$

C. $(x^2 + y^2)^2 = 6x^2 - 2y^2$

D. $(x^2 - y^2)^2 = 6x^2 + 2y^2$

Answer: B



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5. The are (in sq. units) of the quadrilateral formed by the tangents at the end points of the latera-recta to the ellipse $\frac{x^2}{9} + \frac{y^2}{5} = 1$, is :

A. $\frac{27}{4}$

B. 18

C. $\frac{27}{2}$

D. 27

Answer: D



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1. The eccentric angle of the point $(2, \sqrt{3})$ lying on $\frac{x^2}{16} + \frac{y^2}{4} = 1$ is

A. $\frac{\pi}{6}$

B. $\frac{\pi}{3}$

C. $\frac{\pi}{2}$

D. $\frac{\pi}{4}$

Answer: B



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2. If the latus-rectum of the ellipse is half the minor axis, then its eccentricity is :

A. $\frac{\sqrt{3}}{2}$

B. $\frac{1}{\sqrt{3}}$

C. $\frac{1}{\sqrt{2}}$

D. None of these

Answer: A



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3. If C is the centre and L and L' are the ends of the latus-rectum of the ellipse $\frac{x^2}{25} + \frac{y^2}{16} = 1$, then the area of the triangle CLL' is :

- A. 4.8 sq. units
- B. 9.6 sq. units
- C. 19.6 sq. units

D. None of these

Answer: B



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