

ANALYTICAL GEOMETRY

Every question, eight papers

DBE · National Senior Certificate · Mathematics Paper 2

November 2021 - 2024 and May/June 2021, 2022, 2024, 2025

16 questions · 319 marks · 8 papers

Each question is a clip of the original DBE page. The wording, the mark allocations and the diagrams are exactly as they were printed - nothing has been retyped or redrawn. Only the blank answer space has been removed, so work in a separate book.

How it is arranged

One chapter per topic, so you can work through a whole skill at a time.

Inside a chapter the questions run from fewest marks to most. That is an order by size, not by difficulty: unlike the IEB, the DBE does not split its papers into an easier and a harder section, and its marking guidelines carry no cognitive-level tags. Nothing in these papers ranks one question as harder than another, so this booklet does not pretend otherwise.

Contents

■ Points, lines and the figures they make	8 questions, 166 marks
19 to 24 marks each	
■ The circle on the Cartesian plane	8 questions, 153 marks
15 to 20 marks each	

Points, lines and the figures they make

Everything that follows from two points: the gradient between them, the distance, the midpoint, and the equation of the line through them. Then the angle that line makes with the x-axis, and what it takes to prove a figure is the triangle, trapezium or parallelogram the diagram suggests. DBE builds these as one long chain, so an early slip is expensive.

8 questions · 166 marks

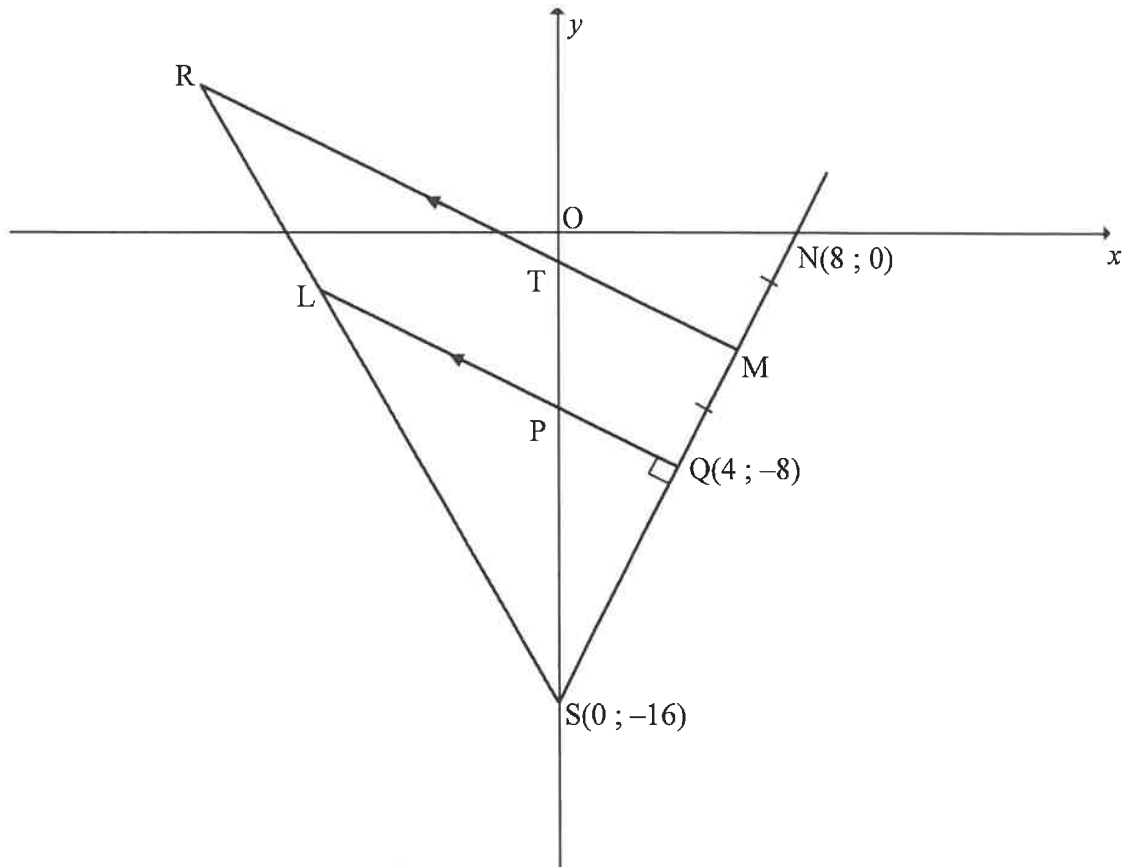
19 to 24 marks each

1. A right angle at Q, and a line drawn parallel to LQ

DBE NSC Paper 2 · May/June 2021 · Q3 · 19 marks

QUESTION 3

In the diagram, $S(0; -16)$, L and $Q(4; -8)$ are the vertices of $\triangle SLQ$ having LQ perpendicular to SQ . SL and SQ are produced to points R and M respectively such that $RM \parallel LQ$. SM produced cuts the x -axis at $N(8; 0)$. $QM = MN$. T and P are the y -intercepts of RM and LQ respectively.



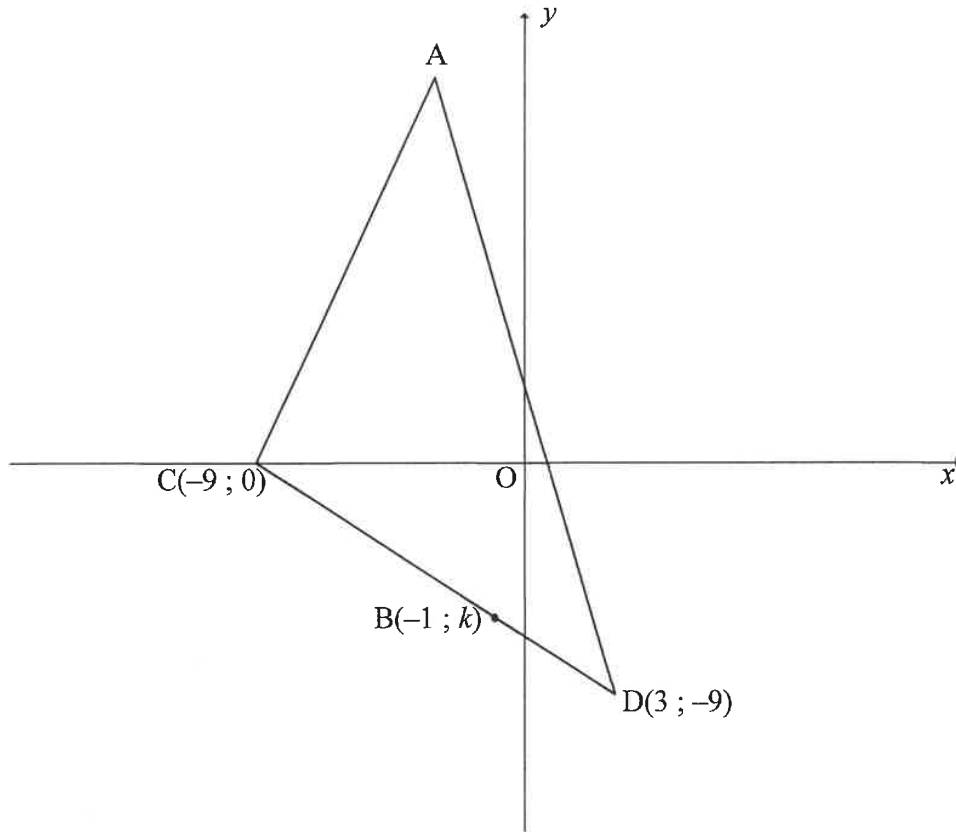
- 3.1 Calculate the coordinates of M . (2)
 - 3.2 Calculate the gradient of NS . (2)
 - 3.3 Show that the equation of line LQ is $y = -\frac{1}{2}x - 6$. (3)
 - 3.4 Determine the equation of a circle having centre at O , the origin, and also passing through S . (2)
 - 3.5 Calculate the coordinates of T . (3)
 - 3.6 Determine $\frac{LS}{RS}$. (3)
 - 3.7 Calculate the area of $PTMQ$. (4)
- [19]

2. The gradient of DC, then a point that has to lie on it

DBE NSC Paper 2 · November 2024 · Q3 · 19 marks

QUESTION 3

In the diagram below, $\triangle ACD$ has vertices A, $D(3; -9)$ and $C(-9; 0)$, where A is a point in the second quadrant. $B(-1; k)$ lies on side DC.



- 3.1 Calculate the gradient of DC. (2)
- 3.2 Determine the equation of DC in the form $y = mx + c$. (2)
- 3.3 Show that $k = -6$. (1)
- 3.4 Calculate the length of DC. (2)
- 3.5 Calculate the ratio of $\frac{DB}{DC}$. (2)
- 3.6 If M is a point on AD such that $AC \parallel MB$, calculate the ratio of $\frac{\text{Area } \triangle MBD}{\text{Area } \triangle ACD}$. (4)
- 3.7 If it is further given that the gradient of AD is -4 and the length of AD is $\sqrt{612}$ units, calculate the coordinates of A. (6)

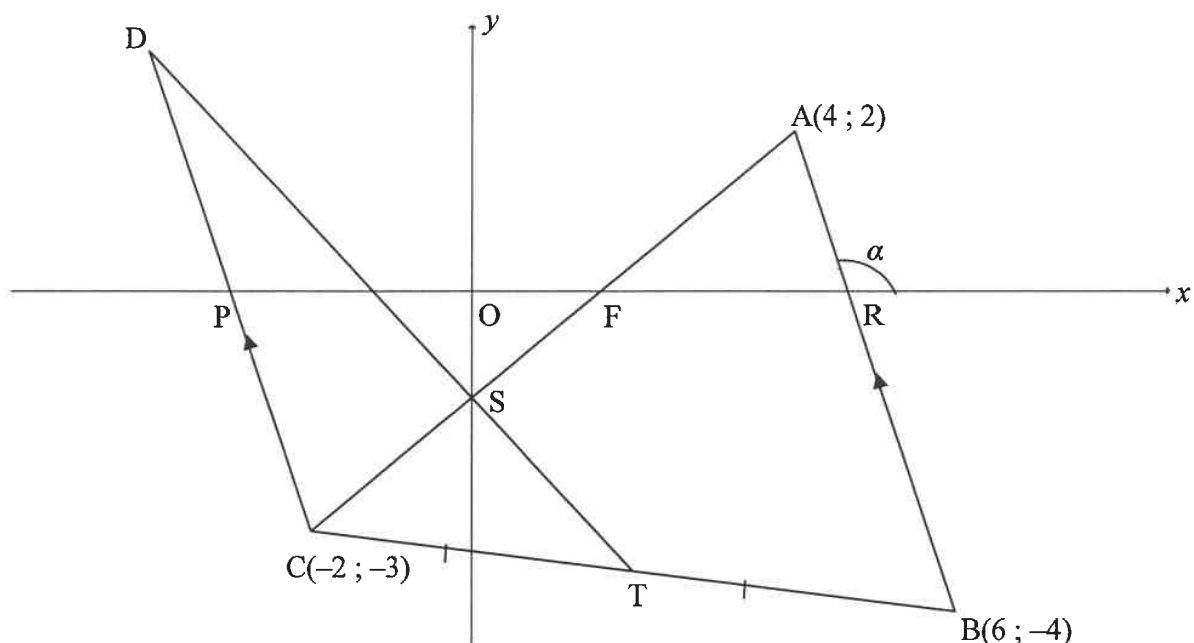
[19]

3. A midpoint, an angle of inclination, and a parallel triangle

DBE NSC Paper 2 · November 2022 · Q3 · 20 marks

QUESTION 3

In the diagram, $A(4; 2)$, $B(6; -4)$ and $C(-2; -3)$ are vertices of $\triangle ABC$. T is the midpoint of CB . The equation of line AC is $5x - 6y = 8$. The angle of inclination of AB is α . $\triangle DCT$ is drawn such that $CD \parallel BA$. The lines AC and DT intersect at S , the y -intercept of AC . P , F and R are the x -intercepts of DC , AC and AB respectively.



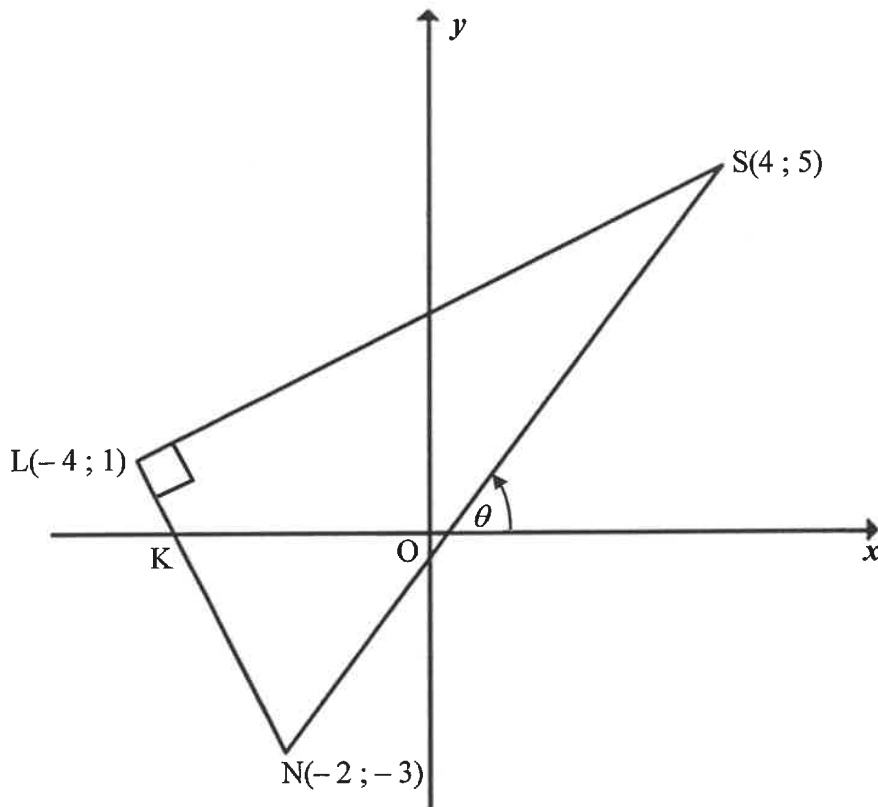
- 3.1 Calculate the:
- 3.1.1 Gradient of AB (2)
 - 3.1.2 Size of α (2)
 - 3.1.3 Coordinates of T (2)
 - 3.1.4 Coordinates of S (2)
- 3.2 Determine the equation of CD in the form $y = mx + c$. (3)
- 3.3 Calculate the:
- 3.3.1 Size of $\hat{DCA}$ (4)
 - 3.3.2 Area of $POSC$ (5)
- [20]

4. A right angle at L, and where LN crosses the x-axis

DBE NSC Paper 2 · November 2023 · Q3 · 20 marks

QUESTION 3

In the figure, $L(-4 ; 1)$, $S(4 ; 5)$ and $N(-2 ; -3)$ are the vertices of a triangle having $\hat{S}LN = 90^\circ$. LN intersects the x-axis at K.



- 3.1 Calculate the length of SL. Leave your answer in surd form. (2)
- 3.2 Calculate the gradient of SN. (2)
- 3.3 Calculate the size of θ , the angle of inclination of SN. (2)
- 3.4 Calculate the size of $\hat{L}NS$. (3)
- 3.5 Determine the equation of the line which passes through L and is parallel to SN. Write your answer in the form $y = mx + c$. (3)
- 3.6 Calculate the area of $\triangle LSN$. (3)
- 3.7 Calculate the coordinates of point P, which is equidistant from L, S and N. (3)
- 3.8 Calculate the size of $\hat{LPS}$. (2)

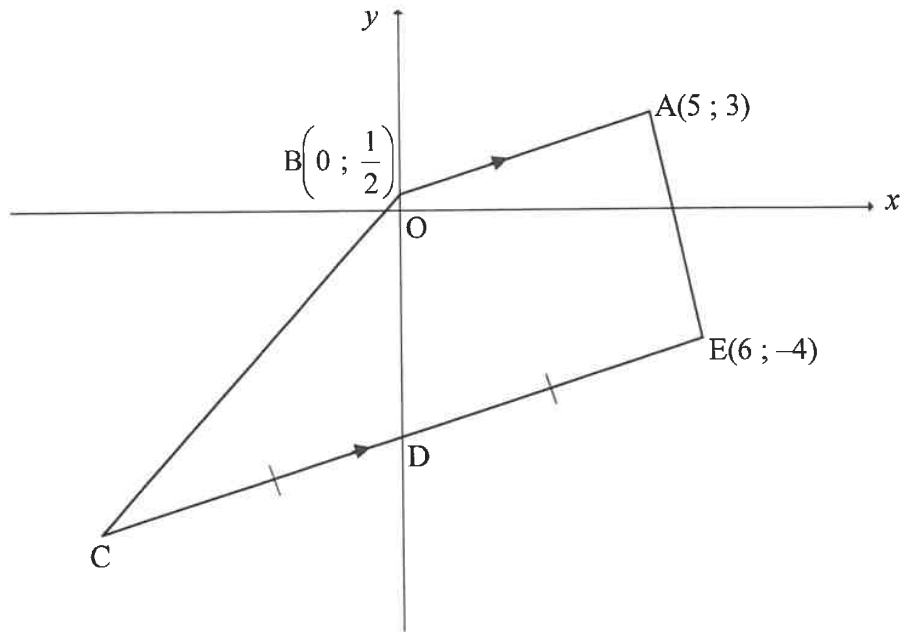
[20]

5. A trapezium with one pair of sides parallel

DBE NSC Paper 2 · May/June 2022 · Q3 · 21 marks

QUESTION 3

In the diagram, $A(5; 3)$, $B\left(0; \frac{1}{2}\right)$, C and $E(6; -4)$ are the vertices of a trapezium having $BA \parallel CE$. D is the y -intercept of CE and $CD = DE$.



- 3.1 Calculate the gradient of AB . (2)
- 3.2 Determine the equation of CE in the form $y = mx + c$. (3)
- 3.3 Calculate the:
- 3.3.1 Coordinates of C (3)
- 3.3.2 Area of quadrilateral $ABCD$ (4)
- 3.4 If point K is the reflection of E in the y -axis:
- 3.4.1 Write down the coordinates of K (2)
- 3.4.2 Calculate the:
- (a) Perimeter of $\triangle KEC$ (4)
- (b) Size of $\hat{KCE}$ (3)

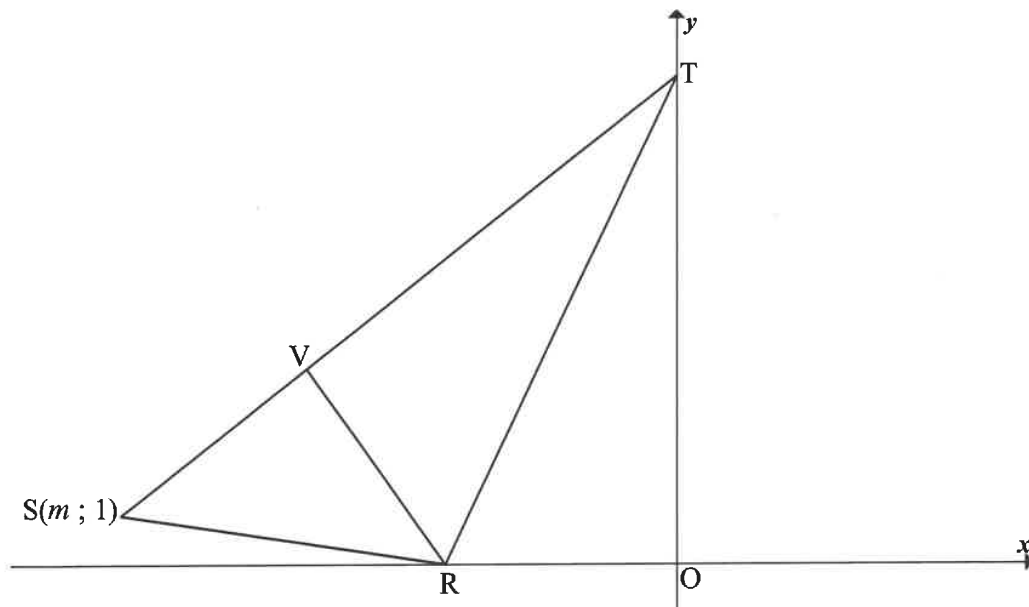
[21]

6. A whole triangle built from one line's equation

DBE NSC Paper 2 · May/June 2025 · Q3 · 21 marks

QUESTION 3

In the diagram below, $\triangle SRT$ is drawn where R lies on the x -axis and S lies to the left of R . T lies on the y -axis and the coordinates of S are $(m ; 1)$. The equation of RT is $2x - y + 10 = 0$.



- 3.1 Calculate the coordinates of R . (2)
- 3.2 Calculate the length of RT . Leave your answer in surd form. (3)
- 3.3 If it is also given that $2RT^2 = 5SR^2$, calculate the value of m . (4)
- 3.4 It is further given that V lies on ST such that VR is perpendicular to ST . Determine the equation of VR in the form $y = mx + c$. (5)
- 3.5 Hence, show that the coordinates of V are $(-8 ; 4)$. (2)
- 3.6 If R' is the reflection of R about the line $x = 0$, calculate the area of $RVTR'$. (5)

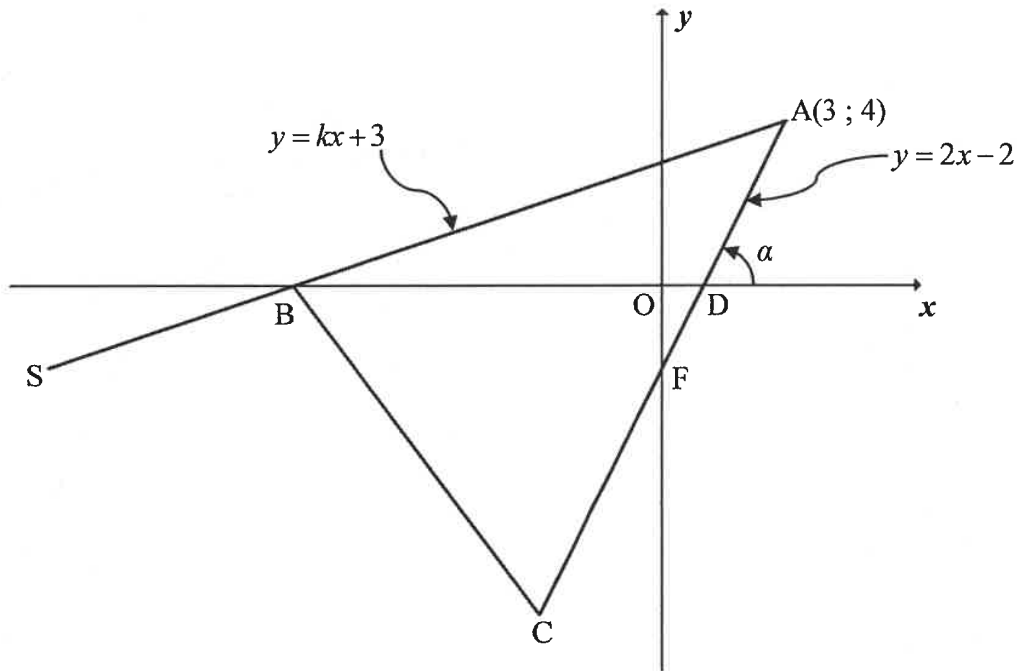
[21]

7. A midpoint, an angle of inclination, and the point S beyond B

DBE NSC Paper 2 · May/June 2024 · Q3 · 22 marks

QUESTION 3

In the diagram, $A(3; 4)$, B and C are vertices of $\triangle ABC$. AB is produced to S . D and F are the x - and y -intercepts of AC respectively. F is the midpoint of AC and the angle of inclination of AC is α . The equation of AB is $y = kx + 3$ and the equation of AC is $y = 2x - 2$.



- 3.1 Show that $k = \frac{1}{3}$. (1)
- 3.2 Calculate the coordinates of B , the x -intercept of line AS . (2)
- 3.3 Calculate the coordinates of C . (4)
- 3.4 Determine the equation of the line parallel to BC and passing through $S(-15; -2)$. Write your answer in the form $y = mx + c$. (5)
- 3.5 Calculate the size of $\hat{BAC}$. (5)
- 3.6 If it is further given that the length of AC is $6\sqrt{5}$ units, calculate the value of $\frac{\text{Area of } \triangle ABD}{\text{Area of } \triangle ASC}$. (5)

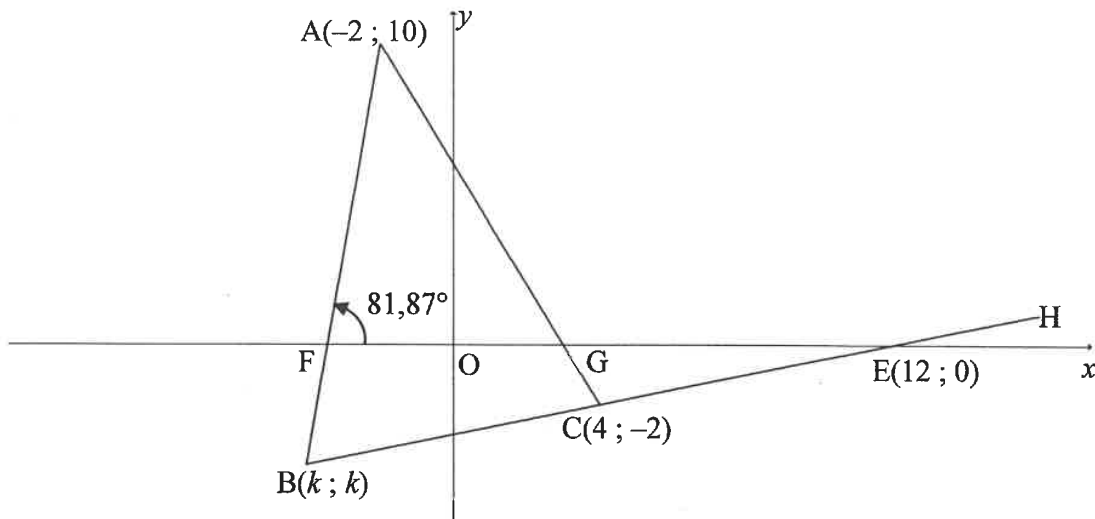
[22]

8. Find k , then three lines all cutting the x -axis

DBE NSC Paper 2 · November 2021 · Q3 · 24 marks

QUESTION 3

In the diagram, $A(-2; 10)$, $B(k; k)$ and $C(4; -2)$ are the vertices of $\triangle ABC$. Line BC is produced to H and cuts the x -axis at $E(12; 0)$. AB and AC intersect the x -axis at F and G respectively. The angle of inclination of line AB is $81,87^\circ$.



- 3.1 Calculate the gradient of:
- 3.1.1 BE (2)
- 3.1.2 AB (2)
- 3.2 Determine the equation of BE in the form $y = mx + c$ (2)
- 3.3 Calculate the:
- 3.3.1 Coordinates of B , where $k < 0$ (2)
- 3.3.2 Size of $\hat{A}$ (4)
- 3.3.3 Coordinates of the point of intersection of the diagonals of parallelogram $ACES$, where S is a point in the first quadrant (2)
- 3.4 Another point $T(p; p)$, where $p > 0$, is plotted such that $ET = BE = 4\sqrt{17}$ units.
- 3.4.1 Calculate the coordinates of T . (5)
- 3.4.2 Determine the equation of the:
- (a) Circle with centre at E and passing through B and T in the form $(x - a)^2 + (y - b)^2 = r^2$ (2)
- (b) Tangent to the circle at point $B(k; k)$ (3)

[24]

The circle on the Cartesian plane

The circle written as an equation, its centre and radius recovered by completing the square, and the fact every tangent question turns on: a tangent is perpendicular to the radius at the point where it touches. Diameters, points that lie on the circle, and occasionally a second circle sharing a tangent.

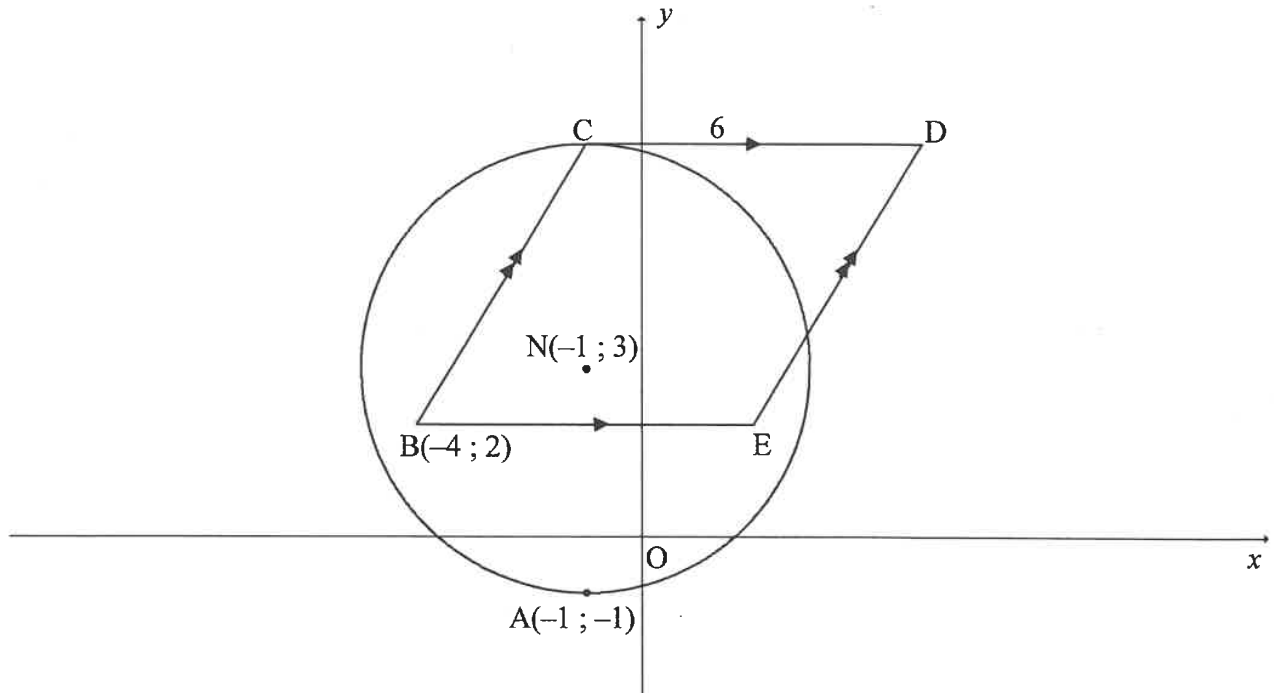
8 questions · 153 marks
15 to 20 marks each

9. A circle inside a parallelogram, with CD as its tangent

DBE NSC Paper 2 · November 2021 · Q4 · 15 marks

QUESTION 4

In the diagram, the circle centred at $N(-1; 3)$ passes through $A(-1; -1)$ and C . $B(-4; 2)$, C , D and E are joined to form a parallelogram such that BE is parallel to the x -axis. CD is a tangent to the circle at C and $CD = 6$ units.



4.1 Write down the length of the radius of the circle. (1)

4.2 Calculate the:

4.2.1 Coordinates of C (2)

4.2.2 Coordinates of D (2)

4.2.3 Area of $\triangle BCD$ (3)

4.3 The circle, centred at N , is reflected about the line $y = x$. M is the centre of the new circle which is formed. The two circles intersect at A and F .

Calculate the:

4.3.1 Length of NM (3)

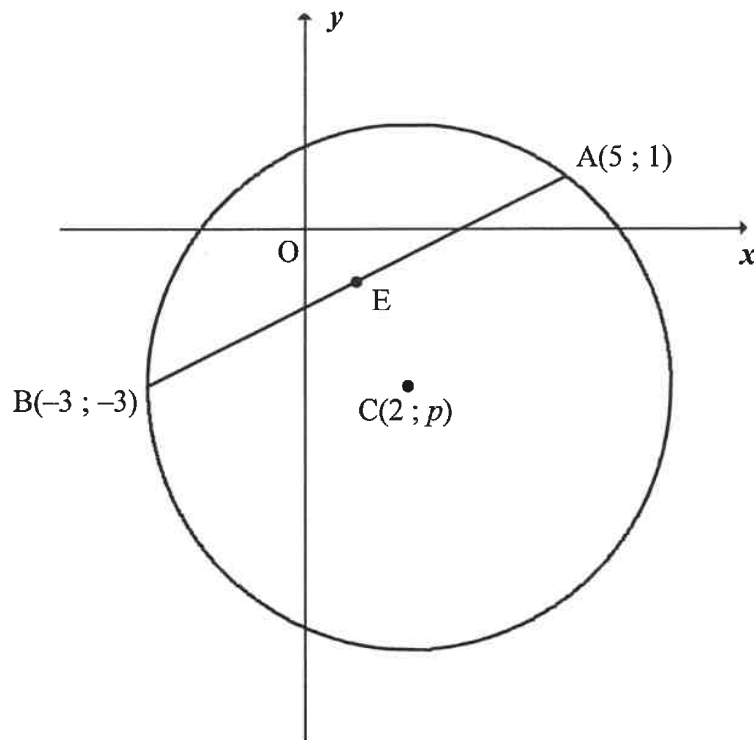
4.3.2 Midpoint of AF (4)
[15]

10. p from two points on the circle, using the midpoint of AB

DBE NSC Paper 2 · May/June 2024 · Q4 · 18 marks

QUESTION 4

In the diagram, the circle centred at $C(2; p)$ is drawn. $A(5; 1)$ and $B(-3; -3)$ are points on the circle. E is the midpoint of AB .



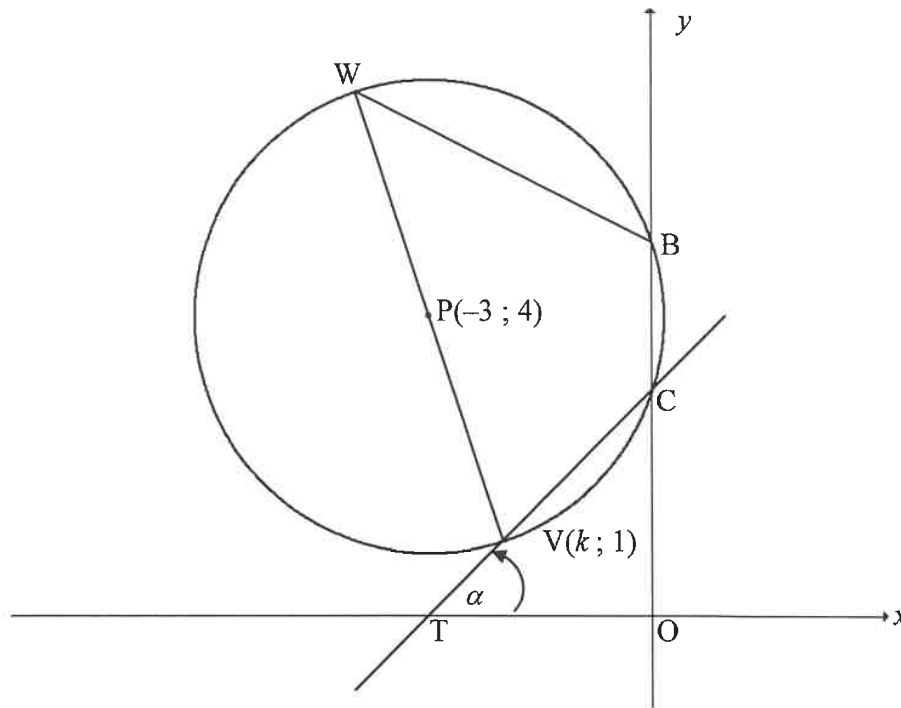
- 4.1 Calculate the coordinates of E , the midpoint of AB . (2)
- 4.2 Calculate the length of AB . Leave your answer in surd form. (1)
- 4.3 Determine the equation of the perpendicular bisector of AB in the form $y = mx + c$. (4)
- 4.4 Show that $p = -3$. (1)
- 4.5 Show, by calculation, that the equation of the circle is $x^2 + y^2 - 4x + 6y - 12 = 0$ (4)
- 4.6 Calculate the values of t for which the straight line $y = tx + 8$ will not intersect the circle. (6)
- [18]**

11. A diameter, a cyclic quadrilateral, and where CV leads

DBE NSC Paper 2 · May/June 2021 · Q4 · 20 marks

QUESTION 4

In the diagram, $P(-3 ; 4)$ is the centre of the circle. $V(k ; 1)$ and W are the endpoints of a diameter. The circle intersects the y -axis at B and C . $BCVW$ is a cyclic quadrilateral. CV is produced to intersect the x -axis at T . $\widehat{OTC} = \alpha$.



- 4.1 The radius of the circle is $\sqrt{10}$. Calculate the value of k if point V is to the right of point P . Clearly show ALL calculations. (5)
- 4.2 The equation of the circle is given as $x^2 + 6x + y^2 - 8y + 15 = 0$. Calculate the length of BC . (4)
- 4.3 If $k = -2$, calculate the size of:
- 4.3.1 α (3)
- 4.3.2 $\widehat{VWB}$ (2)
- 4.4 A new circle is obtained when the given circle is reflected about the line $y = 1$. Determine the:
- 4.4.1 Coordinates of Q , the centre of the new circle (2)
- 4.4.2 Equation of the new circle in the form $(x - a)^2 + (y - b)^2 = r^2$ (2)
- 4.4.3 Equations of the lines drawn parallel to the y -axis and passing through the points of intersection of the two circles (2)

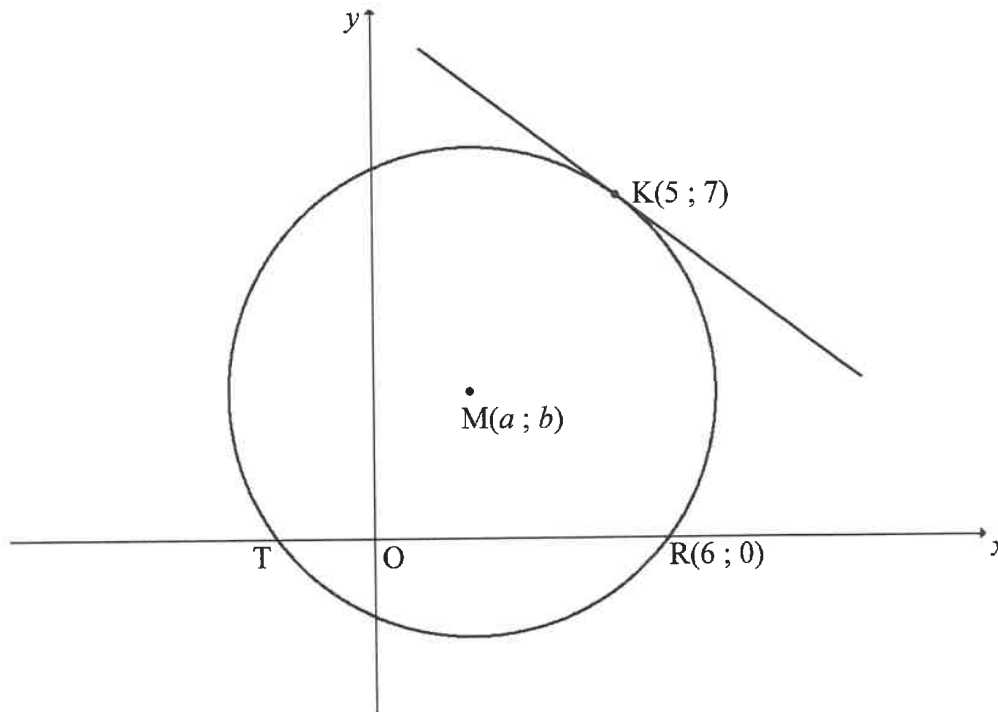
[20]

12. The centre recovered from a tangent and an intercept

DBE NSC Paper 2 · May/June 2022 · Q4 · 20 marks

QUESTION 4

In the diagram, the circle centred at $M(a; b)$ is drawn. T and $R(6; 0)$ are the x -intercepts of the circle. A tangent is drawn to the circle at $K(5; 7)$.



- 4.1 M is a point on the line $y = x + 1$.
- 4.1.1 Write b in terms of a . (1)
- 4.1.2 Calculate the coordinates of M . (5)
- 4.2 If the coordinates of M are $(2; 3)$, calculate the length of:
- 4.2.1 The radius of the circle (2)
- 4.2.2 TR (2)
- 4.3 Determine the equation of the tangent to the circle at K . Write your answer in the form $y = mx + c$. (5)
- 4.4 A horizontal line is drawn as a tangent to the circle M at the point $N(c; d)$, where $d < 0$.
- 4.4.1 Write down the coordinates of N . (2)
- 4.4.2 Determine the equation of the circle centred at N and passing through T . Write your answer in the form $(x - a)^2 + (y - b)^2 = r^2$. (3)

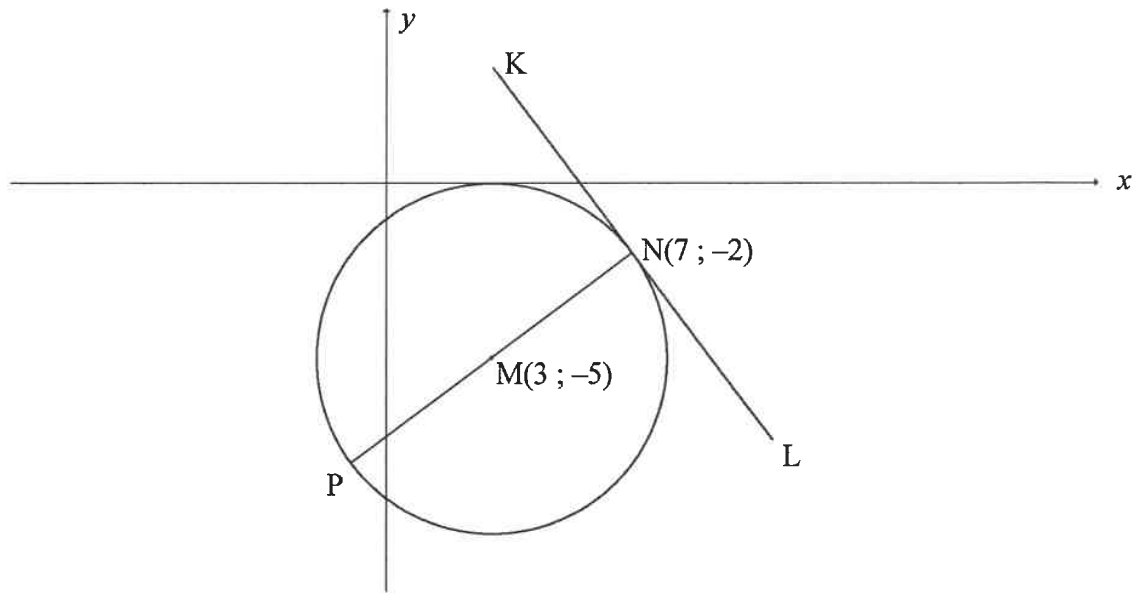
[20]

13. PN as a diameter, and the tangent at N

DBE NSC Paper 2 · November 2022 · Q4 · 20 marks

QUESTION 4

In the diagram, $M(3 ; -5)$ is the centre of the circle having PN as its diameter. KL is a tangent to the circle at $N(7 ; -2)$.



4.1 Calculate the coordinates of P . (2)

4.2 Determine the equation of:

4.2.1 The circle in the form $(x-a)^2 + (y-b)^2 = r^2$ (3)

4.2.2 KL in the form $y = mx + c$ (5)

4.3 For which values of k will $y = -\frac{4}{3}x + k$ be a secant to the circle? (4)

4.4 Points $A(t ; t)$ and B are not shown on the diagram.

From point A , another tangent is drawn to touch the circle with centre M at B .

4.4.1 Show that the length of tangent AB is given by $\sqrt{2t^2 + 4t + 9}$. (2)

4.4.2 Determine the minimum length of AB . (4)

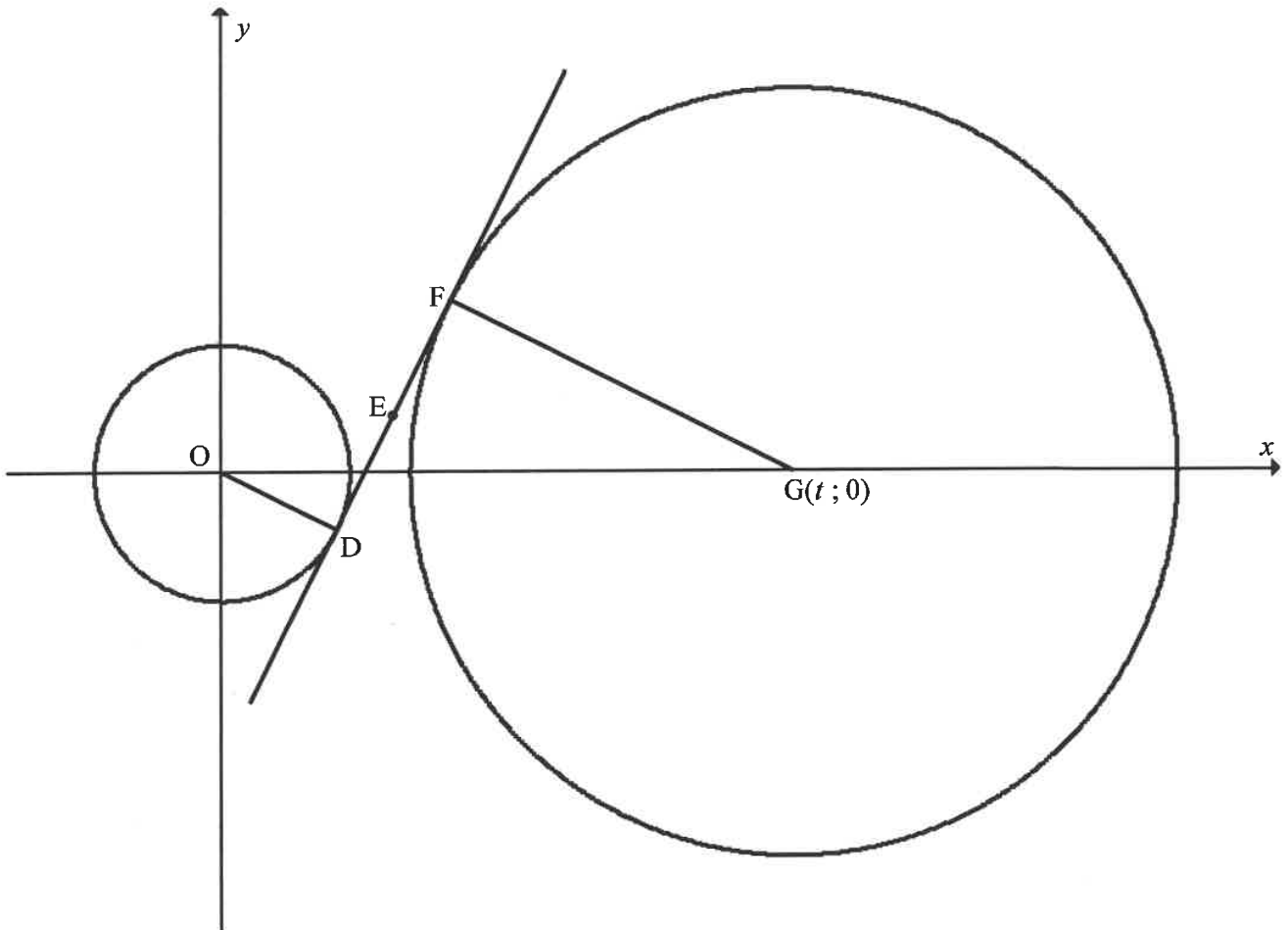
[20]

14. Two circles, and the tangent common to both

DBE NSC Paper 2 · November 2023 · Q4 · 20 marks

QUESTION 4

In the diagram, the circle with centre O has the equation $x^2 + y^2 = 20$. $G(t; 0)$ is the centre of the larger circle. A common tangent touches the circles at D and F respectively, such that $D(p; -2)$ lies in the 4th quadrant.



- 4.1 Given that $D(p; -2)$ lies on the smaller circle, show that $p = 4$. (2)
- 4.2 $E(6; 2)$ is the midpoint of DF . Determine the coordinates of F . (3)
- 4.3 Determine the equation of the common tangent, DF , in the form $y = mx + c$. (4)
- 4.4 Calculate the value of t . Show ALL working. (3)
- 4.5 Determine the equation of the larger circle in the form $ax^2 + by^2 + cx + dy + e = 0$. (4)
- 4.6 The smaller circle must be translated by k units along the x -axis to touch the larger circle internally. Calculate the possible values of k . (4)

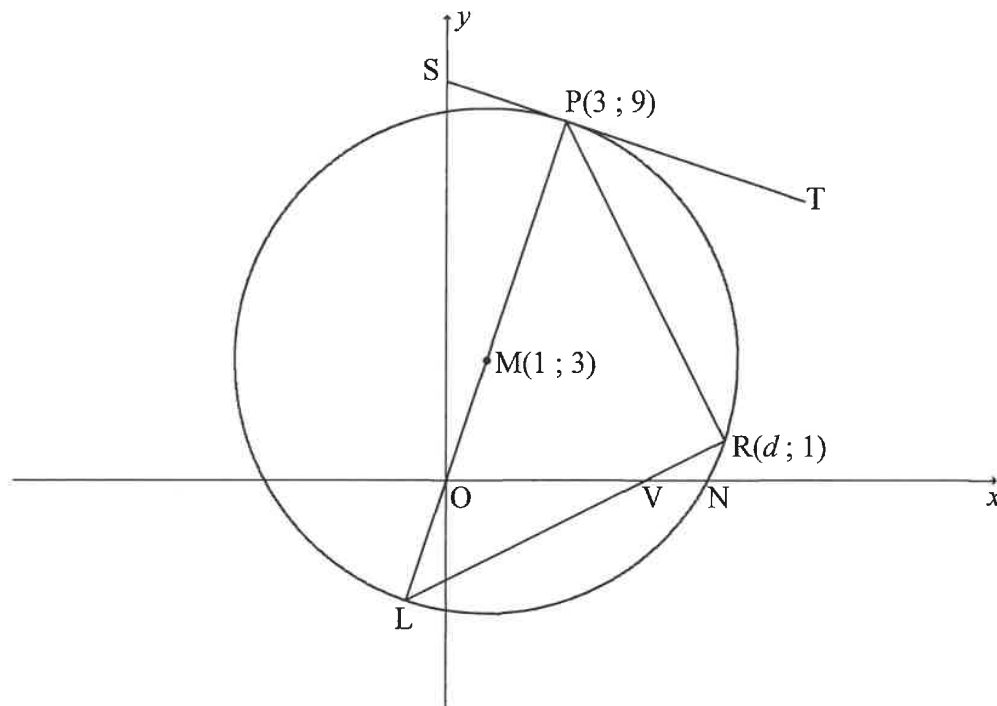
[20]

15. A tangent at P, then the other points that lie on the circle

DBE NSC Paper 2 · November 2024 · Q4 · 20 marks

QUESTION 4

In the diagram, $M(1 ; 3)$ is the centre of the circle. The circle cuts the x -axis at N . ST is a tangent to the circle at $P(3 ; 9)$. $R(d ; 1)$, with $d > 0$, and L lie on the circle. O and V are the x -intercepts of PL and RL respectively.



- 4.1 Write down the coordinates of L . (2)
- 4.2 Determine the equation of tangent ST to the circle at P . (4)
- 4.3 Show that the equation of the circle with centre M is $x^2 + y^2 - 2x - 6y - 30 = 0$. (4)
- 4.4 Show that $d = 7$. (2)
- 4.5 Calculate the size of $\hat{L}$. (5)
- 4.6 TR is a tangent to the circle at R . Prove that $PT \perp RT$. (3)

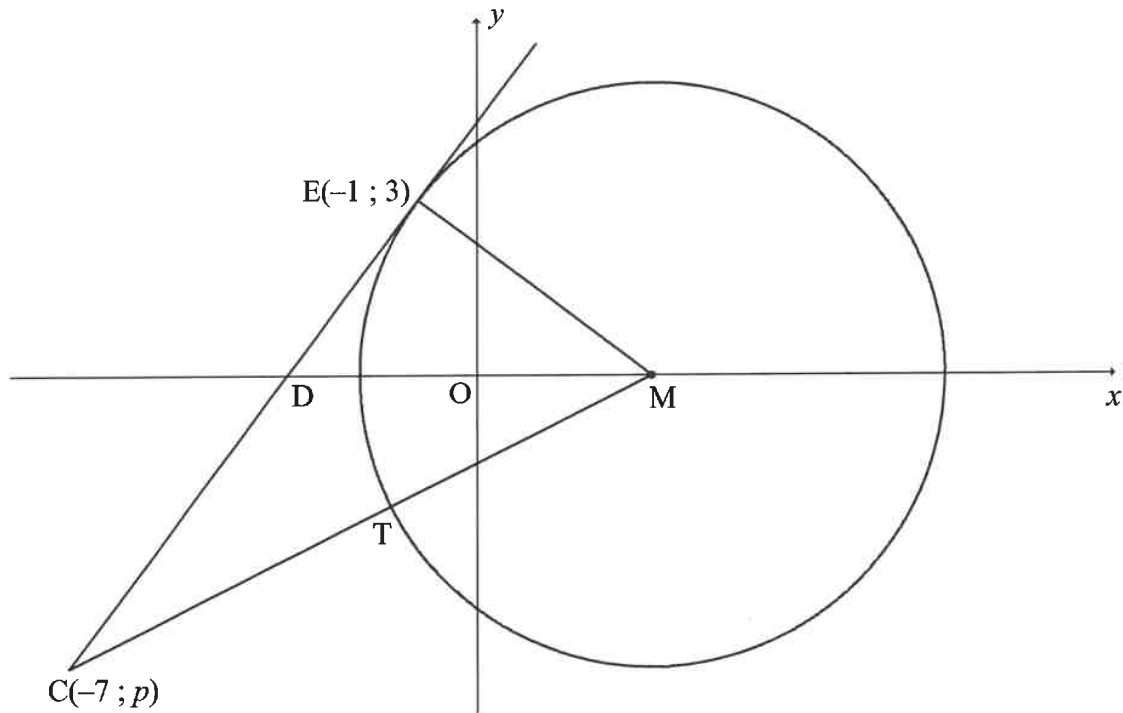
[20]

16. A tangent at E, and fifteen units along MT

DBE NSC Paper 2 · May/June 2025 · Q4 · 20 marks

QUESTION 4

In the diagram, M is the centre of the circle having equation $(x-3)^2 + y^2 = 25$. E(-1 ; 3) and T are points on the circle. EC is a tangent to the circle at E and cuts the x-axis at D. $ED = \frac{15}{4}$ units. MT is produced to meet the tangent at C(-7 ; p).



- 4.1 Write down the size of $\hat{CEM}$. (1)
- 4.2 Determine the equation of the tangent EC in the form $y = mx + c$. (4)
- 4.3 Calculate the length of DM. (3)
- 4.4 Show that $p = -5$ (1)
- 4.5 Calculate the coordinates of S if SEMC is a parallelogram and $x_s < 0$. (3)
- 4.6 If the radius of the circle, centred at M, is increased by 7 units, determine whether S lies inside or outside the new circle. Support your answer with the necessary calculations. (3)
- 4.7 If ET is drawn, calculate the size of $\hat{ETM}$. (5)

[20]

Index by paper

Every analytical geometry question in each paper, and where it sits in this booklet.

May/June 2021		2 questions, 39 of 150 marks	
Q3	A right angle at Q, and a line drawn parallel to LQ	19 marks	p3
Q4	A diameter, a cyclic quadrilateral, and where CV leads	20 marks	p15
November 2021		2 questions, 39 of 150 marks	
Q3	Find k, then three lines all cutting the x-axis	24 marks	p10
Q4	A circle inside a parallelogram, with CD as its tangent	15 marks	p13
May/June 2022		2 questions, 41 of 150 marks	
Q3	A trapezium with one pair of sides parallel	21 marks	p7
Q4	The centre recovered from a tangent and an intercept	20 marks	p16
November 2022		2 questions, 40 of 150 marks	
Q3	A midpoint, an angle of inclination, and a parallel triangle	20 marks	p5
Q4	PN as a diameter, and the tangent at N	20 marks	p17
November 2023		2 questions, 40 of 150 marks	
Q3	A right angle at L, and where LN crosses the x-axis	20 marks	p6
Q4	Two circles, and the tangent common to both	20 marks	p18
May/June 2024		2 questions, 40 of 150 marks	
Q3	A midpoint, an angle of inclination, and the point S beyond B	22 marks	p9
Q4	p from two points on the circle, using the midpoint of AB	18 marks	p14
November 2024		2 questions, 39 of 150 marks	
Q3	The gradient of DC, then a point that has to lie on it	19 marks	p4
Q4	A tangent at P, then the other points that lie on the circle	20 marks	p19
May/June 2025		2 questions, 41 of 150 marks	
Q3	A whole triangle built from one line's equation	21 marks	p8
Q4	A tangent at E, and fifteen units along MT	20 marks	p20

Index by topic

A question appears under every topic it uses, so it can be found even when it is filed in another chapter.

Gradient

6 questions

- | | | |
|----|---|-----|
| 1. | A right angle at Q, and a line drawn parallel to LQ | p3 |
| 2. | The gradient of DC, then a point that has to lie on it | p4 |
| 5. | A trapezium with one pair of sides parallel | p7 |
| 6. | A whole triangle built from one line's equation | p8 |
| 7. | A midpoint, an angle of inclination, and the point S beyond B | p9 |
| 8. | Find k, then three lines all cutting the x-axis | p10 |

The midpoint of a line segment

3 questions

- | | | |
|-----|---|-----|
| 3. | A midpoint, an angle of inclination, and a parallel triangle | p5 |
| 7. | A midpoint, an angle of inclination, and the point S beyond B | p9 |
| 10. | p from two points on the circle, using the midpoint of AB | p14 |

The distance between two points

2 questions

- | | | |
|-----|---|-----|
| 4. | A right angle at L, and where LN crosses the x-axis | p6 |
| 16. | A tangent at E, and fifteen units along MT | p20 |

The equation of a straight line

7 questions

- | | | |
|----|---|-----|
| 1. | A right angle at Q, and a line drawn parallel to LQ | p3 |
| 2. | The gradient of DC, then a point that has to lie on it | p4 |
| 4. | A right angle at L, and where LN crosses the x-axis | p6 |
| 5. | A trapezium with one pair of sides parallel | p7 |
| 6. | A whole triangle built from one line's equation | p8 |
| 7. | A midpoint, an angle of inclination, and the point S beyond B | p9 |
| 8. | Find k, then three lines all cutting the x-axis | p10 |

Parallel and perpendicular lines

4 questions

- | | | |
|----|--|----|
| 1. | A right angle at Q, and a line drawn parallel to LQ | p3 |
| 3. | A midpoint, an angle of inclination, and a parallel triangle | p5 |
| 4. | A right angle at L, and where LN crosses the x-axis | p6 |
| 5. | A trapezium with one pair of sides parallel | p7 |

The angle of inclination

3 questions

- | | | |
|----|---|-----|
| 3. | A midpoint, an angle of inclination, and a parallel triangle | p5 |
| 7. | A midpoint, an angle of inclination, and the point S beyond B | p9 |
| 8. | Find k, then three lines all cutting the x-axis | p10 |

Proving what a figure is

3 questions

- | | | |
|----|---|-----|
| 2. | The gradient of DC, then a point that has to lie on it | p4 |
| 5. | A trapezium with one pair of sides parallel | p7 |
| 9. | A circle inside a parallelogram, with CD as its tangent | p13 |

Areas on the Cartesian plane

2 questions

- | | | |
|----|---|-----|
| 6. | A whole triangle built from one line's equation | p8 |
| 8. | Find k, then three lines all cutting the x-axis | p10 |

The equation of a circle

7 questions

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| 10. | p from two points on the circle, using the midpoint of AB | p14 |
| 11. | A diameter, a cyclic quadrilateral, and where CV leads | p15 |
| 12. | The centre recovered from a tangent and an intercept | p16 |
| 13. | PN as a diameter, and the tangent at N | p17 |
| 14. | Two circles, and the tangent common to both | p18 |
| 15. | A tangent at P, then the other points that lie on the circle | p19 |
| 16. | A tangent at E, and fifteen units along MT | p20 |

Centre and radius from the equation

6 questions

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| 9. | A circle inside a parallelogram, with CD as its tangent | p13 |
| 10. | p from two points on the circle, using the midpoint of AB | p14 |
| 11. | A diameter, a cyclic quadrilateral, and where CV leads | p15 |
| 12. | The centre recovered from a tangent and an intercept | p16 |
| 13. | PN as a diameter, and the tangent at N | p17 |
| 15. | A tangent at P, then the other points that lie on the circle | p19 |

Tangents to a circle

7 questions

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| 9. | A circle inside a parallelogram, with CD as its tangent | p13 |
| 11. | A diameter, a cyclic quadrilateral, and where CV leads | p15 |
| 12. | The centre recovered from a tangent and an intercept | p16 |
| 13. | PN as a diameter, and the tangent at N | p17 |
| 14. | Two circles, and the tangent common to both | p18 |
| 15. | A tangent at P, then the other points that lie on the circle | p19 |
| 16. | A tangent at E, and fifteen units along MT | p20 |

Two circles together

1 question

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| 14. | Two circles, and the tangent common to both | p18 |
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Where these came from

So that "every analytical geometry question" is a claim you can check.

Eight DBE NSC Mathematics Paper 2 papers were read end to end:
November 2021, 2022, 2023, 2024 and May/June 2021, 2022, 2024, 2025.

All 338 questions in them were classified. These papers are scans - they carry no text layer at all - so the structure was rebuilt by reading them with OCR, and then checked three ways: every paper adds back up to exactly 150, the Afrikaans paper matches the English question for question, and the official marking guideline, which IS ordinary text, agrees with the marks read off every question.

DBE publishes an official marking guideline for every one of these papers. The companion file "CAPS_P2_Analytical_Solutions.pdf" carries the guideline for each question here, in the same order and under the same numbers.