CONTOUREDUCATION

Website: contoureducation.com.au | **Phone:** 1800 888 300
Email: hello@contoureducation.com.au

VCE Mathematical Methods ½

AOS 1 Revision [1.0]

Contour Check Part 1

Contour Check

Section A: [1.1] – Linear & Coordinate Geometry (Checkpoints)

Sub-Section [1.1.1]: Solve and Graph Linear Equations and Inequalities

Question 1

Solve the following linear equations and inequalities for x:

a. $3x + 8 = 20$

b. $2x + 6 = 3(x - 2)$

c. $5x + 2 < 4x + 10$

Question 2

Solve the following linear equations and inequalities for x:

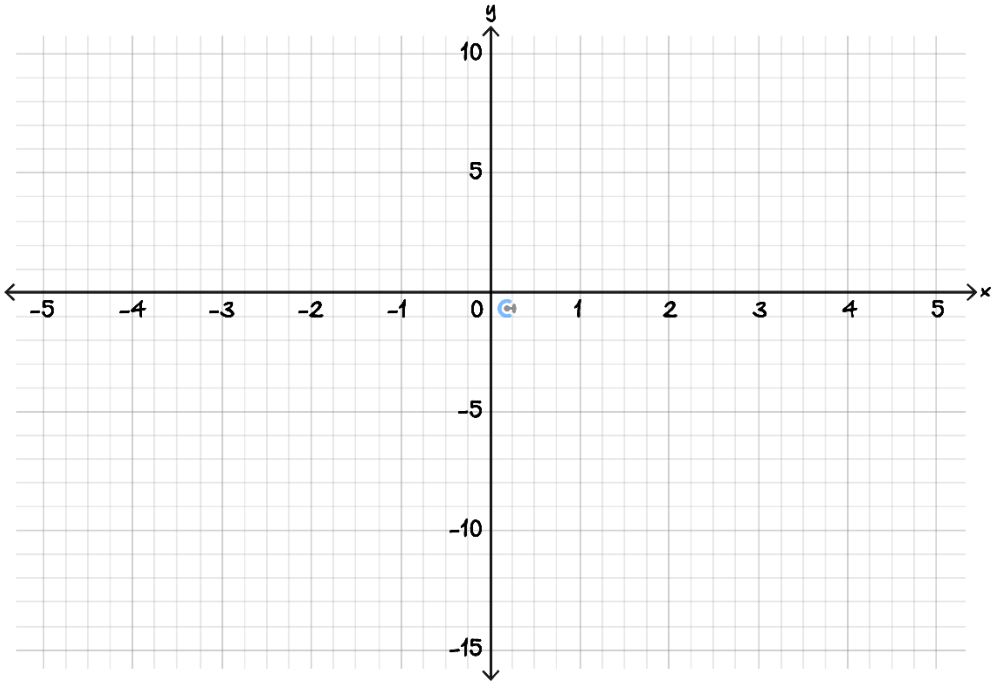
a. $3x + 2 = 12x + 3$

b. $\frac{2x+3}{3} > 3(x-5)$

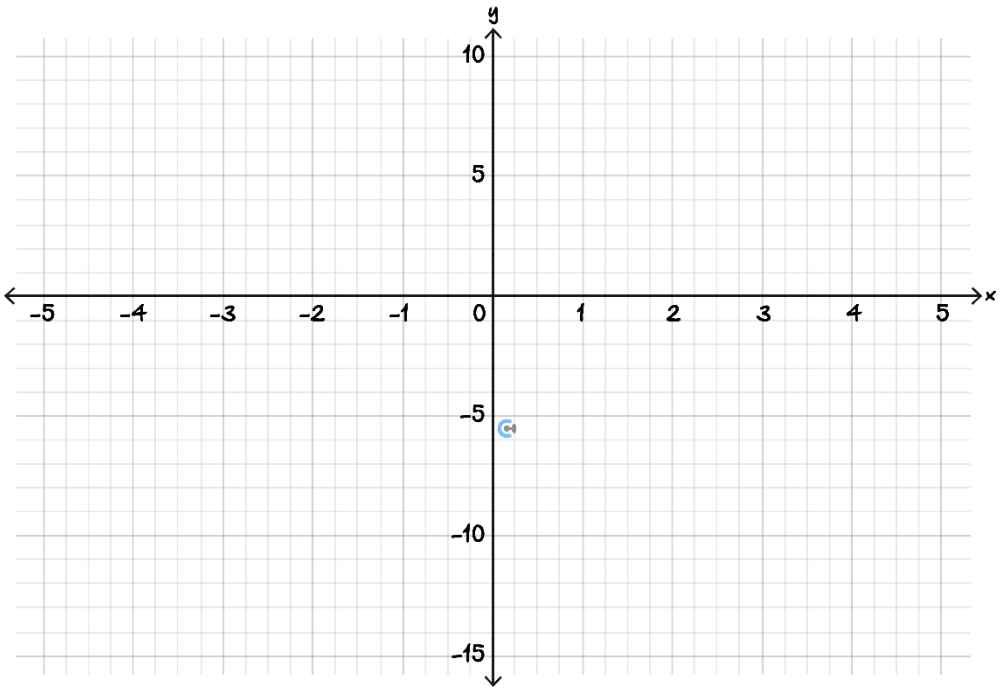
c. $\frac{5x+3}{4} \leq 10x+8$

Question 3

a. Sketch the line governed by the equation $2y-4x=-8$ on the axis below. Label all axes intercepts.



b. Shade the region governed by the equation $2y - 4x > -8$ on the axis below.



Question 4

Solve the inequality $\frac{1}{4}(5x - 3) \geq 2x + 8$ for x.

Space for Personal Notes

Sub-Section [1.1.2]: Find The Midpoint and Distance Between Two Points or Functions

Question 5

a. Find the midpoint of $(1, -3)$ and $(6, -10)$.

b. The points (a, b) and $(3, 4)$ have a midpoint $(2, 3)$. Find the values of a and b.

Question 6

a. Find the distance between points $(2, 5)$ and $(5, 2)$.

b. The curve $y = (x - 1)^2 + k$ and the line $y = 3$ has a minimum vertical distance of 4. Find the value of k.

Space for Personal Notes

Question 7

The distance between the point $(2, 2)$ and a point P on the line $y = 2x + 2$ is 4 units. Find all possible coordinates for P.

Question 8

The distance between the point $(1, 2)$ and a point P on the line $y = 3x - 1$ is 4 units. Find all possible coordinates for P.

Space for Personal Notes

Sub-Section [1.1.3]: Find Parallel and Perpendicular Lines

Question 9

State whether the following lines are parallel or perpendicular:

a. $y = 3x + 1$ and $y = 3x + 3$

b. $y = 2x + 3$ and $y = -\frac{1}{2}x + 2$

Question 10

Find the equation of the line that is parallel to the line $y = 2x + 1$ and passes through the point $(5, 2)$.

Space for Personal Notes

Question 11

Find the equation of the line that is perpendicular to $y = 3x + 6$ and passes through the point $(6, 3)$.

Question 12

Find the equation of the line that is perpendicular to $y = \sqrt{3}x + 1$ and passes through the point $(2, 4)$.

Space for Personal Notes

Sub-Section [1.1.4]: Finding The Angle Between a Line and the x-axis or Between Two Lines

Question 13

Find the angle that $y = -x + 1$ makes with the positive direction of the x-axis.

Question 14

A line that makes an angle of $30°$ with the positive x-axis passes through the point $(1, 1)$. Find the equation of the line.

Space for Personal Notes

Question 15

It is known that the lines $y = mx + 3$ and $y = 4x - 2$ make an angle of 45° when they intersect. Find all possible values of m.

Question 16

Find the acute angle made between the lines $y = \sqrt{3}x + 1$ and $y = \frac{x}{\sqrt{3}} - 1$. Give your answer in degrees correct to two decimal places.

Space for Personal Notes

Sub-Section [1.1.5]: Find The Unknown Value for a System of Linear Equations

Question 17

Consider the simultaneous linear equations:

$$y = kx + 6$$

$$y = 2x + 5$$

Where $x, y \in R$ and k is a real constant.

a. Find the value(s) of k for which the system of equations has no solution.

b. Find the value(s) of k for which the system of equations has infinitely many solutions.

c. Find the value(s) of k for which the system of equations has a unique solution.

Space for Personal Notes

Question 18

Consider the simultaneous linear equations:

$$-3kx + y = k$$

$$-3x + ky = -1$$

Where $x, y \in R$ and k is a real constant.

a. Find the value(s) of k for which the system of equations has no real solution.

b. Find the value(s) of k for which the system of equations has infinitely many solutions.

c. Find the value(s) of k for which the system of equations has a unique solution.

Space for Personal Notes

Question 19

Consider the simultaneous linear equations:

$$kx + y = 2$$

$$2x + (k - 2)y = 4$$

Where $x, y \in R$ and k is a real constant.

a. Find the value(s) of k for which the system of equations has no real solution.

b. Find the value(s) of k for which the system of equations has infinitely many solutions.

c. Find the value(s) of k for which the system of equations has a unique solution.

Space for Personal Notes

Question 20

Consider the simultaneous linear equations:

$$(k-2)x+3y=5$$

$$4x+(k+1)y=k+7$$

Where $x, y \in R$ and k is a real constant.

Find the value(s) of k for which the system has no real solution.

Space for Personal Notes

Section B: [1.2] – Linear & Coordinate Geometry Exam Skills (Checkpoints)

Sub-Section [1.2.1]: Applying Midpoint to Find Reflected Points

Question 21

Find the reflection of the point $(4, 6)$ about the line $y = 4$.

Question 22

The point $(3, 2)$ is reflected in the line $y = b$, and to become the point $(3, -6)$. Find the value of b.

Space for Personal Notes

Question 23

Consider the function $f(x) = x^2 + 1$.

a. The point $A(1, 1)$ on the graph of $y = f(x)$ is reflected about the line $y = 0$. Find the coordinates of the reflected points' position.

b. The entire graph of $y = f(x)$ is reflected about the line $y = 0$. Find the equation of this new graph.

Question 24

The function $y = (x - 1)^2 + 3$ is reflected about the line $x = 3$ and then reflected about the line $y = 2$. Find the equation of the graph after these reflections.

Space for Personal Notes

Sub-Section [1.2.2]: Find Vertical and Horizontal Distance Between Functions

Question 25

Find the vertical distance between $f(x) = 3x + 1$ and $g(x) = x + 3$ when $x = 2$.

Question 26

Find the horizontal distance between the function $f(x) = x + 1$ and $g(x) = x^2 - 1$ when $y = 8$.

Space for Personal Notes

Question 27

Consider the functions $y = x + 3$ and $y = x^2 + 1$.

a. Solve the inequality $x + 3 > x^2 + 1$.

b. Hence, determine the vertical distance between the two functions when $x = 1$.

Space for Personal Notes

Sub-Section [1.2.3]: Finding Distance Between a Point and a Function

Question 28

Find the distance between the point $(1, 2)$ and the function $y = x^2$, when $x = 3$.

Question 29

The distance between the point $A(4, 1)$ and the point $B(-3, m)$ is 7, find the possible value(s) of m.

Space for Personal Notes

Question 30

Find the point(s) on the line $y = 3x + 3$ which have a distance of 5 from the point $(1, 1)$.

Space for Personal Notes

Section C: [1.3] - Quadratics (Checkpoints)

Sub-Section [1.3.1]: Rewriting Quadratics in Different Forms

Question 31

Find the factorised forms of these quadratics:

a. $x^2 - 4$

b. $x^2 - 3x$

c. $5x^2 + 10x$

Space for Personal Notes

Question 32

a. Express $x^2 + 4x + 3$ in intercept form, $(a(x-b)(x-c))$.

b. Express $x^2 - 2x + 3$ in turning point form, $(a(x-h)^2 + k)$.

c. Factorise $x^2 + 6x + 9$.

Space for Personal Notes

Question 33

a. Factorise $3x^2 - 12x - 15$.

b. Express $2x^2 - 12x + 9$ in turning point form.

c. Express $2(x - 1)(x + 3)$ in turning point form.

Space for Personal Notes

Question 34

Factorise $6x^2 - \sqrt{5}x - 5$.

Space for Personal Notes

Sub-Section [1.3.2]: Find Solutions and Number of Solutions to Quadratic Equations

Question 35

Find all real solutions to the following equations:

a. $x^2 = -5x$

b. $4x^2 - 16 = 0$

c. $2x^2 - 18x = 0$

Space for Personal Notes

Question 36

a. Find all real solutions to the equation $x^2 - 10x + 25 = 0$.

b. How many solutions does the equation $x^2 + 2x - 15$ have?

c. Find all real solutions to the equation $3(x + 1)^2 = 12$.

Space for Personal Notes

Question 37

a. Find all real solutions to the equation $x^2 - 6x = 4$.

b. For what values of a does the equation $ax^2 - 6x = 18$ have no real solutions?

c. Find all real solutions to the equation $5x^2 + 20x = 15$.

Question 38

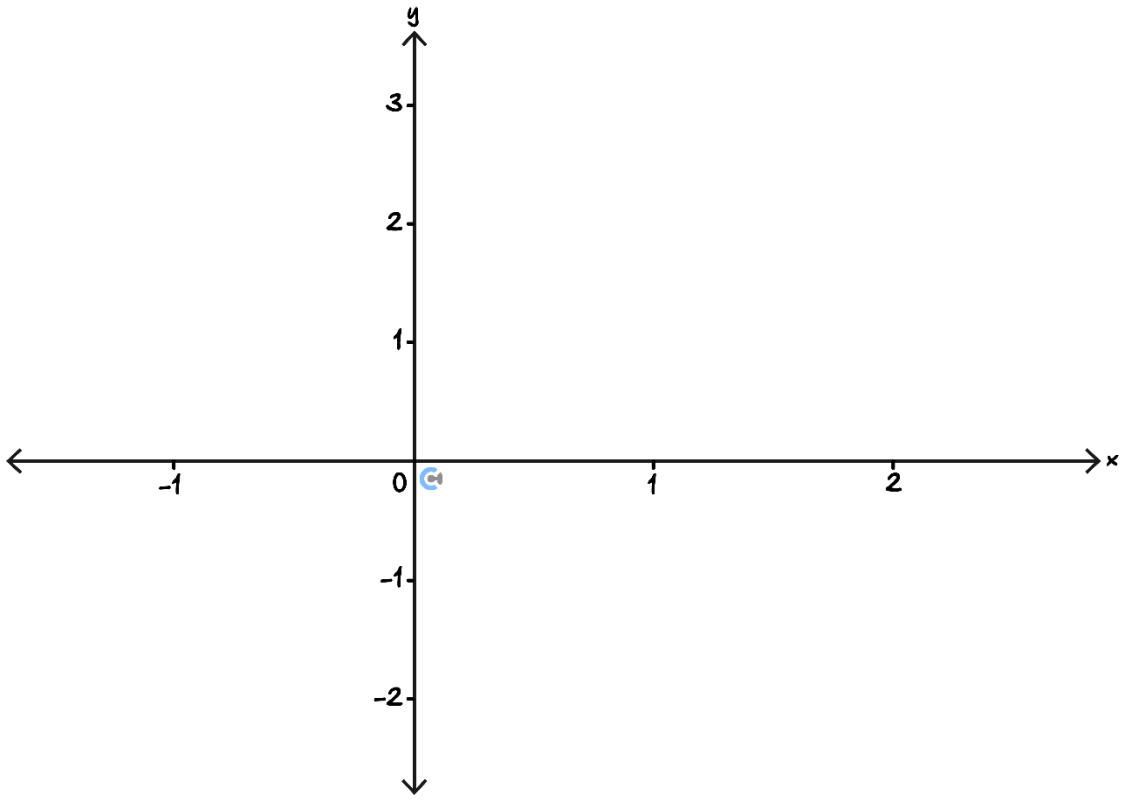
For what values of b does the equation $2x(b - x) = 5$ have no real solutions?

Space for Personal Notes

Sub-Section [1.3.3]: Graph and Find Rules From the Graph of Quadratic Equations

Question 39

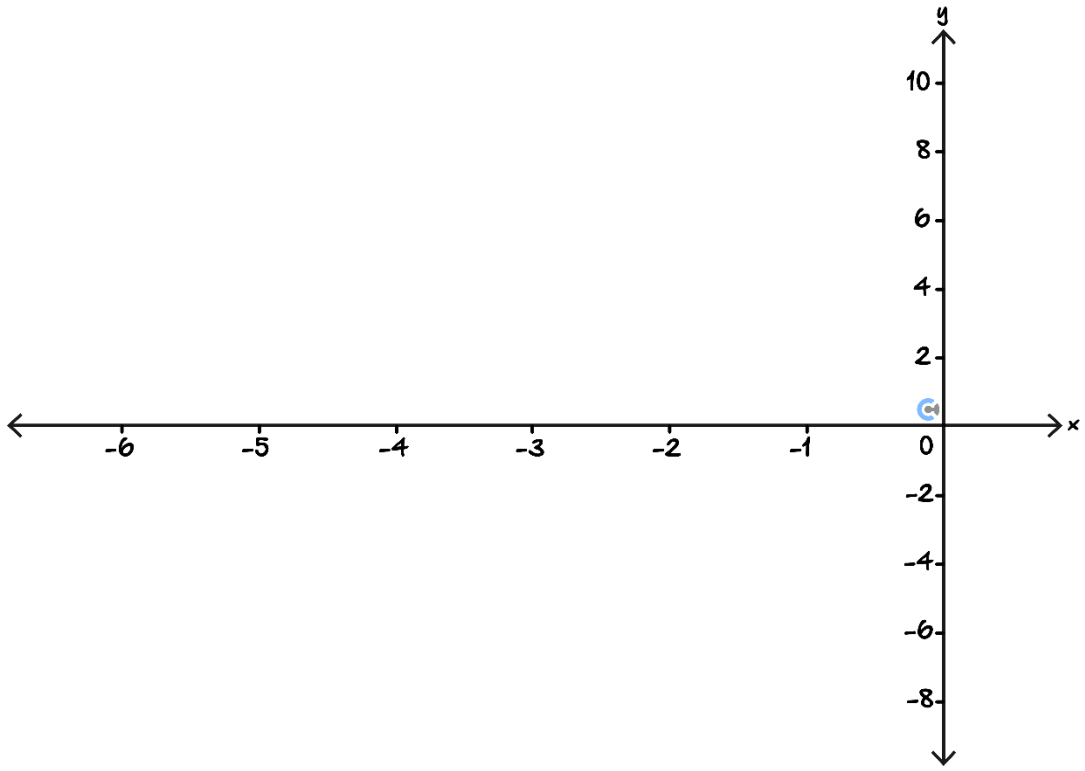
Sketch the graph of $y = (x + 1)(x - 2)$ on the axis below.



Space for Personal Notes

Question 40

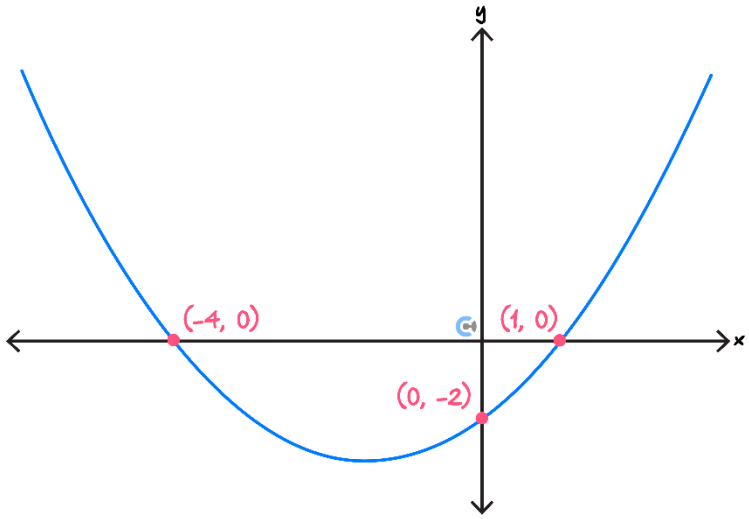
Sketch the graph of $y = 2(x + 3)^2 - 8$ on the axis below, labelling axis intercepts and turning points with their coordinates.



Space for Personal Notes

Question 41

The graph of a parabola is shown below.

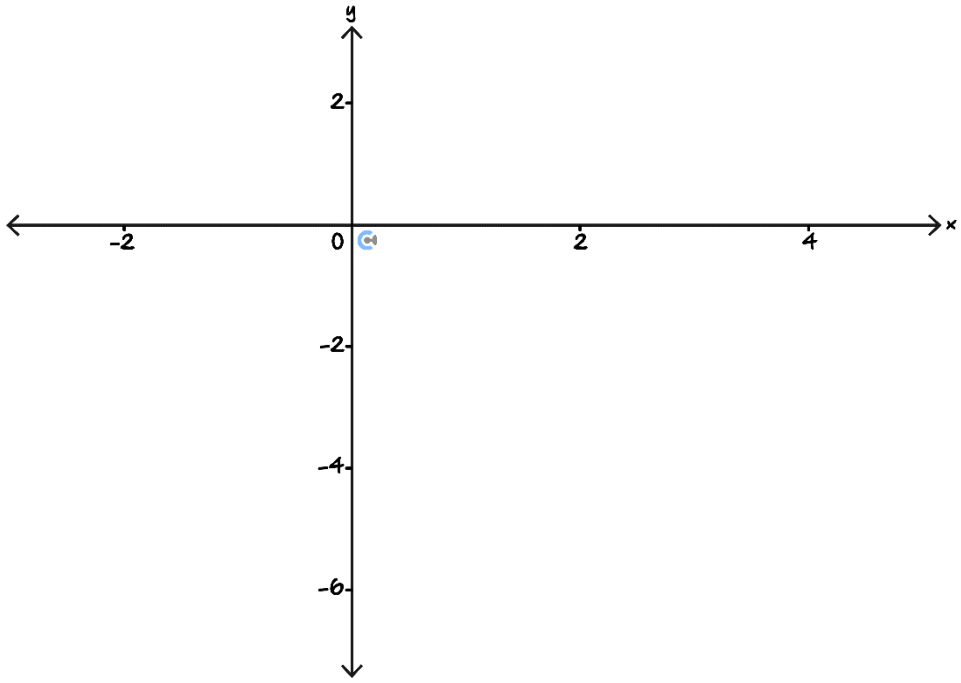


Find the rule of this parabola.

Space for Personal Notes

Question 42

Sketch the graph of $3y = 5 - (x - 1)^2$ on the axis below, labelling axis intercepts and turning points with their coordinates.



Space for Personal Notes

Sub-Section [1.3.4]: Solving Quadratic Inequalities and Hidden Quadratics

Question 43

a. Solve $x^2 > 1$ for x.

b. Solve $x(x-2) \leq 3$ for x.

Space for Personal Notes

Question 44

Solve $(x-1)^4-(x-1)^2=12$ for x.

Question 45

Solve $x^2+6x+8\geq 2$ for x.

Space for Personal Notes

Question 46

For what values of x is $ax^2 + bx + c < d$, where $a, b, c, d \in R,\ a < 0$ and $c > d$?

Space for Personal Notes

Section D: [1.4] - Quadratics Exam Skills (Checkpoints)

Sub-Section [1.4.1]: Find Turning Point Form Using Turning Points

Question 47

Find the turning point of the parabola $y = 2(x-1)^2 + 3$.

Question 48

Find the equation of a parabola that has a turning point at $(5, 3)$ and has a y-axis intercept of 8.

Space for Personal Notes

Question 49

Find the turning point of the parabola $y = 2x^2 - 4x + 5$.

Space for Personal Notes

Sub-Section [1.4.2]: Apply Quadratics to Model a Scenario

Question 50

A ball is thrown up into the air from a height of 1 metre. It reaches its maximum height of 2 metres after 1 second. The height in metres of the ball h, t seconds after the ball is launched is:

$$h(t) = a(t-1)^2 + 2$$

Find the value of a.

Question 51

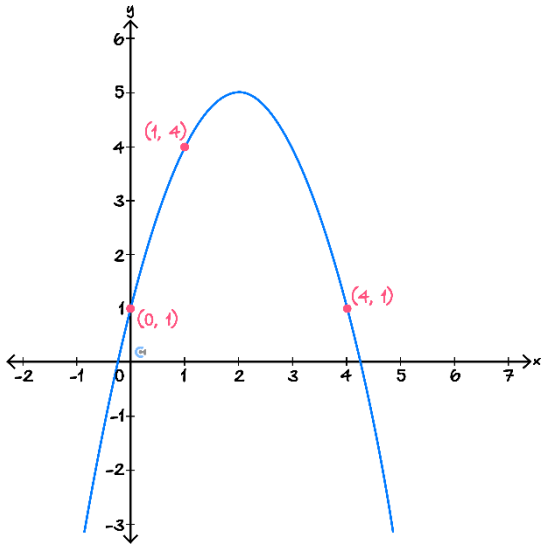
A parabola-shaped bridge is used to cross a long river. The height of the bridge above the water level in metres, h, is a quadratic function of the horizontal distance of a point of a bridge from the starting river bank, x.

At the starting river bank, the height of the bridge is 2 metres above water level, and 5 metres away from the starting point ($x = 5$), the bridge is at its highest point, 6 metres above the water level ($h = 6$).

Relate x and h.

Question 52

A river passes through 3 points in a park as shown below:



Where the x-axis represents the position due east from the centre of the park, and the y-axis represents the position due north from the centre of the park. We can relate the north position (y) of the river to the east position (x) of the river through the equation:

$$y = ax^2 + bx + c$$

Find the values of a, b and c.

Sub-Section [1.4.3]: Apply Family of Functions to Find an Unknown of Function

Question 53

Consider the parabola $y = kx^2 - 6$. Find the value(s) of k such that the horizontal distance between x-axis intercepts of the parabola is less than 4.

Question 54

Let $y = x^2 + 4kx - 1$. Find the values of k such that $y \geq -2$ for all x.

Question 55

Find all values of k such that the equation $(x-k-1)^2-4=k$ has two real solutions for x, one positive and one negative.

Space for Personal Notes

Sub-Section [1.4.4]: Harder Quadratic Inequalities

Question 56

Solve $x(x+3) > 4$ for x.

Question 57

Solve $1 + \frac{2}{x-2} \leq \frac{5}{(x-2)^2}$ for x.

Question 58

Solve $(x^2 + 2)^2 - 4 \geq 8x^2$ for x.

Space for Personal Notes

Section E: [1.5] – Polynomials (Checkpoints)

Sub-Section [1.5.1]: Identify the Properties of Polynomials and Solve Long Division

Question 59

Consider the polynomial $f(x) = 3x^2 - 4x^4 + 1 - 2x$.

a. State the degree of $f(x)$.

_____

b. State the leading coefficient of $f(x)$.

_____

c. State the constant term of $f(x)$.

_____

Space for Personal Notes

Question 60

Simplify the following using polynomial long division:

$$\frac{x^3 + 2x^2 - 5x - 6}{x - 2}$$

Question 61

The polynomial $P(x) = x^4 - 2x^2 - 5x + 3$ can be written in the form $P(x) = Q(x)(x - 2) + r$, where $r \in R$ and $Q(x)$ is a real valued polynomial. Find $Q(x)$ and r.

Question 62

The polynomial $P(x) = 2x^4 + 3x^3 - 5x + 1$ can be written in the form $P(x) = Q(x)(x^2 - 2x + 3) + R(x)$, where $R(x)$ is a polynomial of degree 1 and $Q(x)$ is a polynomial.

a. State the degree of $Q(x)$.

b. Find $Q(x)$ and $R(x)$.

Space for Personal Notes

Sub-Section [1.5.2]: Apply Reminder and Factor Theorem to Find Reminders and Factors

Question 63

Find the remainder of the division $\frac{f(x)}{g(x)}$, where:

a. $f(x) = x^3 - 7x + 8$ and $g(x) = x + 3$.

b. $f(x) = 2x^3 - 6x^2 - 2x + 4$ and $g(x) = x - 1$.

c. $f(x) = -3x^3 + 8x^2 - 3x + 2$ and $g(x) = 3x + 1$.

Space for Personal Notes

Question 64

For the polynomial $f(x) = ax^3 2x^2 - 3ax + 1$, we get a remainder of 5 when $f(x)$ is divided by $x + 2$. Find the value of a.

Space for Personal Notes

Question 65

Consider the expression:

$$f(x) = 2x^3 - ax^2 + b$$

Where a and b are non-zero constants.
It is known that $x + 1$ is a factor of $f(x)$ and that the remainder when $f(x)$ is divided by $x - 2$ is 3. Find the values of a and b.

Space for Personal Notes

Question 66

Find a cubic polynomial $f(x)$ which has the following properties:

- $f(x)$ has a leading coefficient of -2.
- $f(x)$ divided by $x^2 - 1$ leaves a remainder of 1.
- $x - 3$ is a factor of $f(x)$.

Space for Personal Notes

Sub-Section [1.5.3]: Find Factored Form of Polynomials

Question 67

Factorise $x^3 - 2x^2 - x + 2$ as a product of three linear factors.

Question 68

Factorise $x^3 - 6x^2 + 3x + 10$ as a product of three linear factors.

Question 69

Factorise $2x^3 + \frac{25x^2}{3} + x - \frac{4}{3}$ as a product of three linear factors.

Space for Personal Notes

Question 70

Use the fact that $x^n - 1 = (1 + x + x^2 + \cdots + x^{n-1})(x - 1)$ to factorise $1 + x^2 + x^4 + x^6 + x^8$ as a product of two-degree four polynomials.

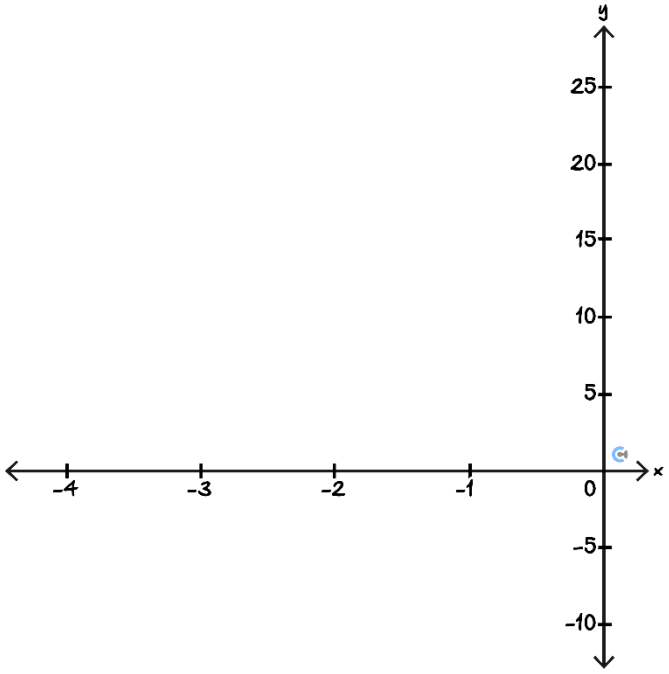
Space for Personal Notes

Sub-Section [1.5.4]: Graph Factored and Unfactored Polynomials

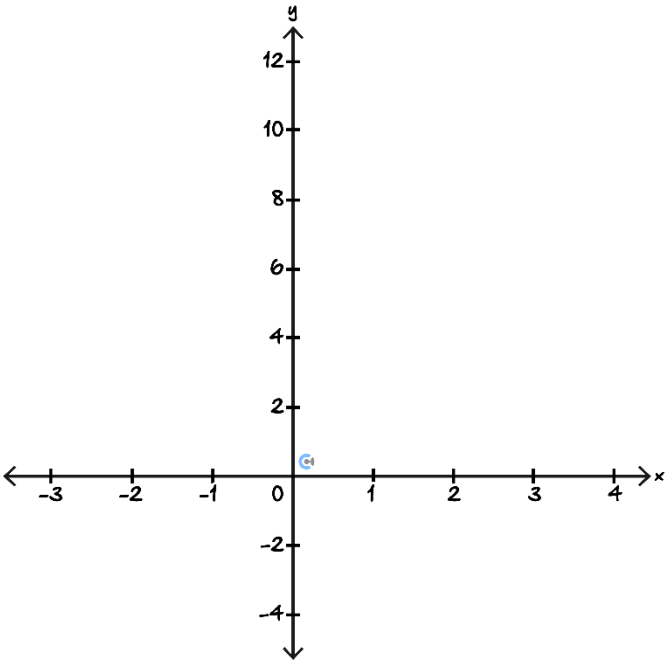
Question 71

Sketch the graphs of each of the functions on the axes provided.

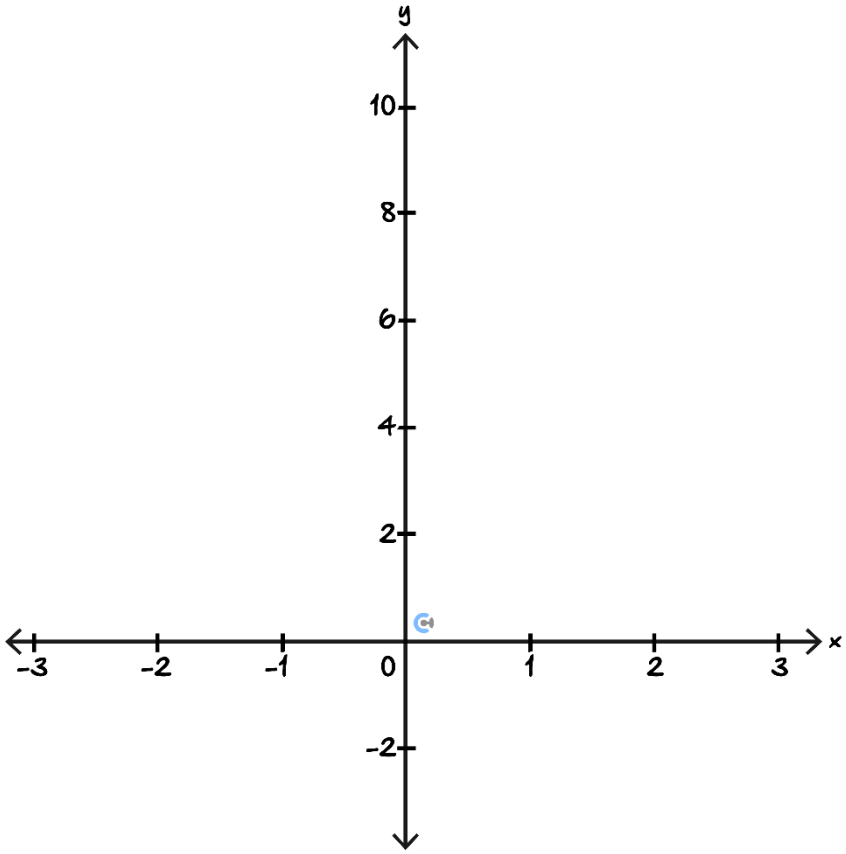
a. $y = 8 - (x + 2)^3$



b. $y = (x - 1)(x + 2)(x - 3)$



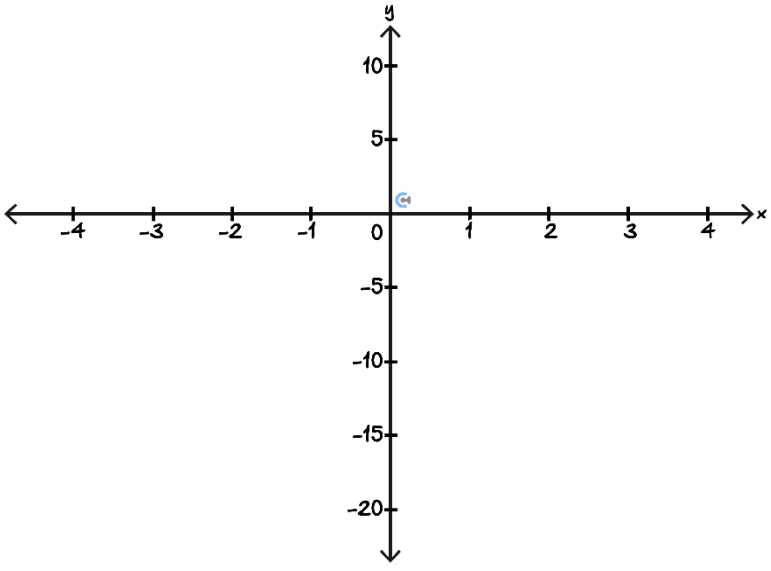
c. $y = 2 + (x - 1)^4$



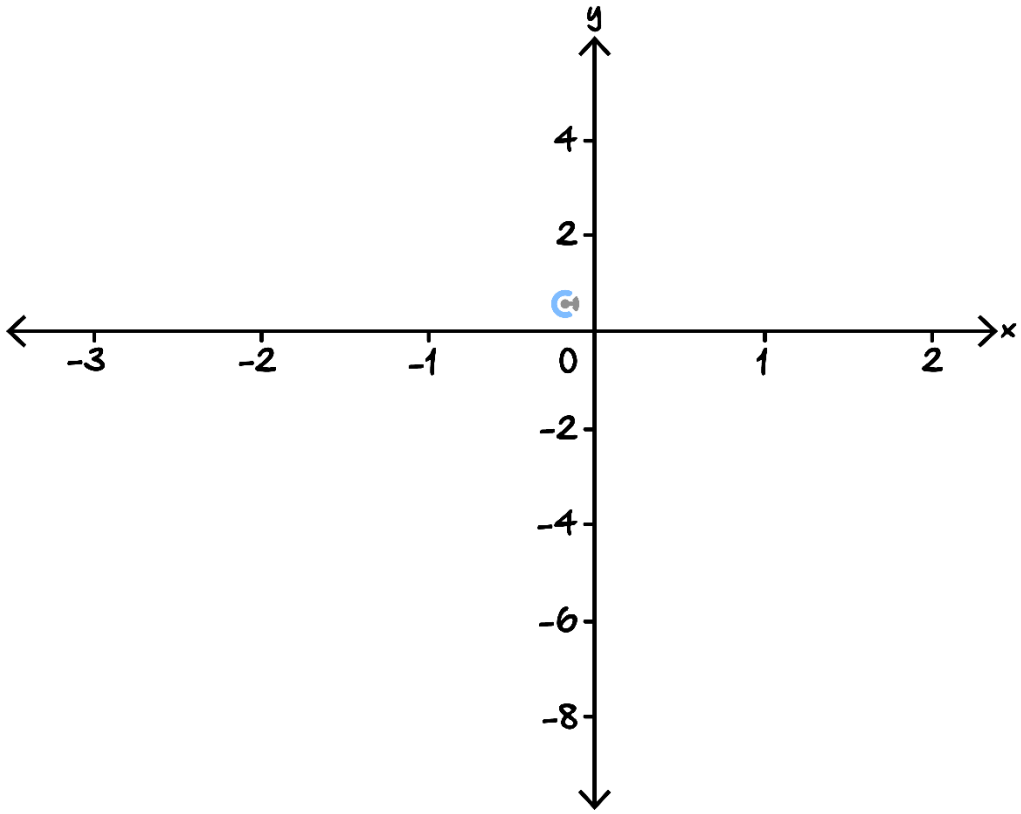
Question 72

Sketch the graphs of each of the functions on the axes provided.

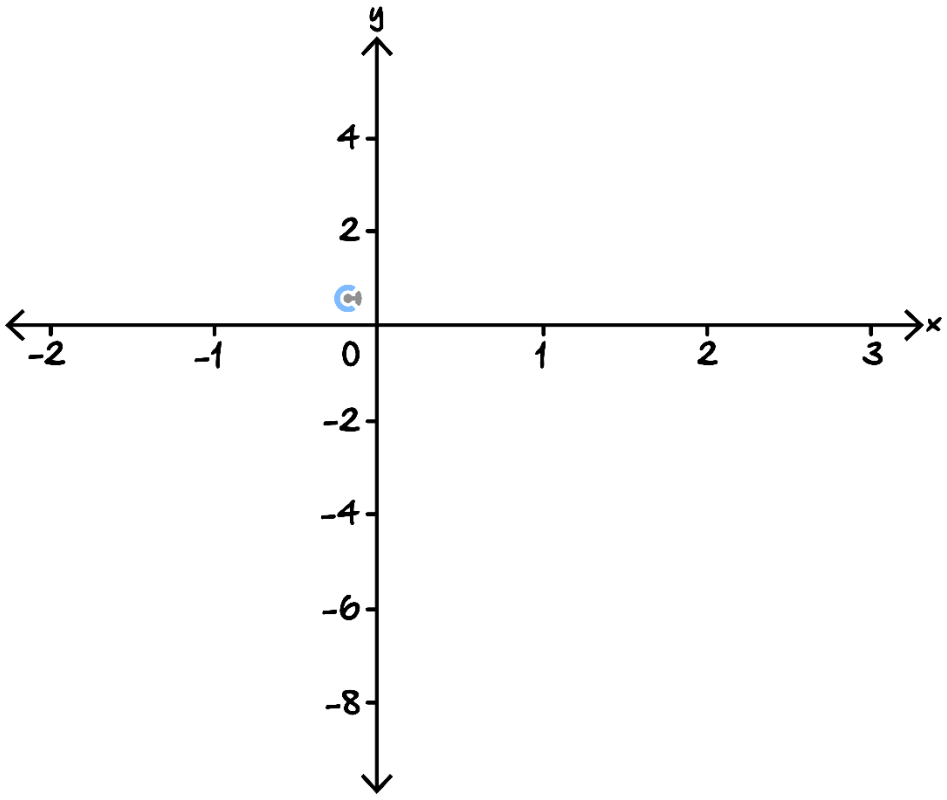
a. $y = (x + 3)^2(x - 2)$



b. $y = (x-1)(x+2)^3$



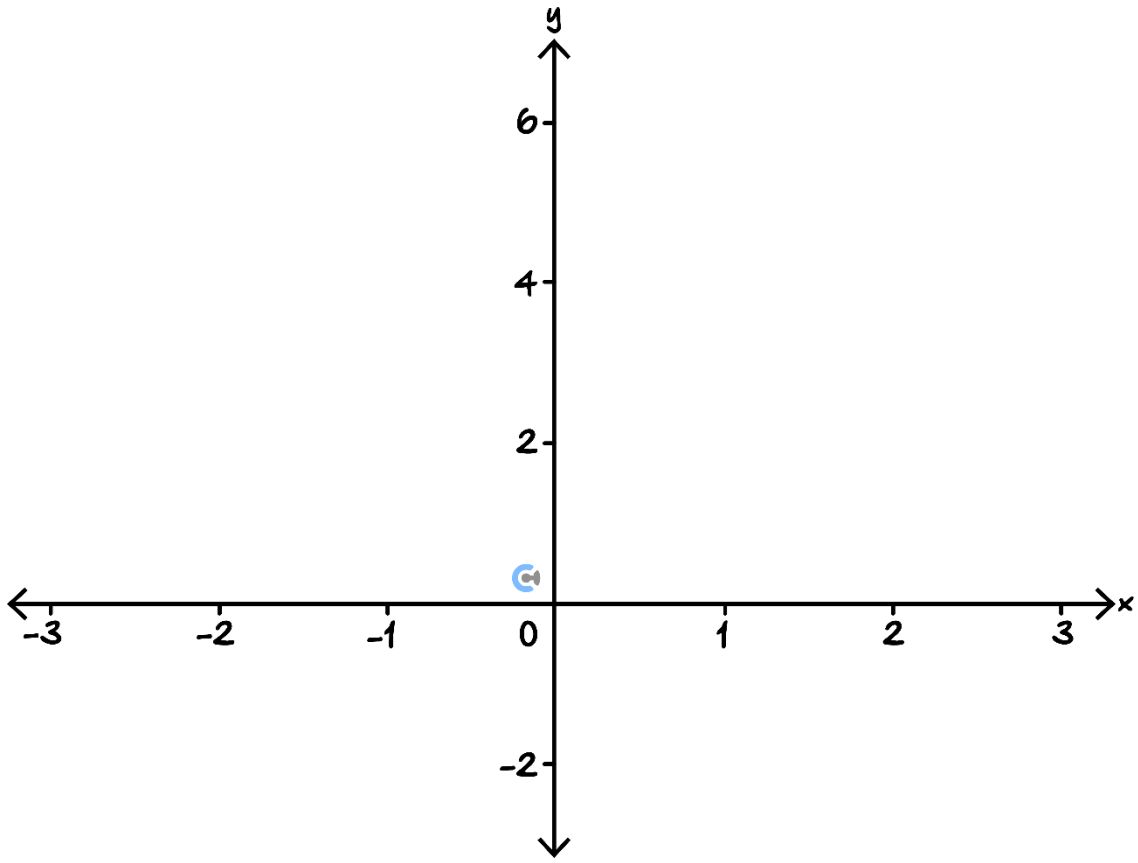
c. $y = (x+1)^2(x-3)^3$



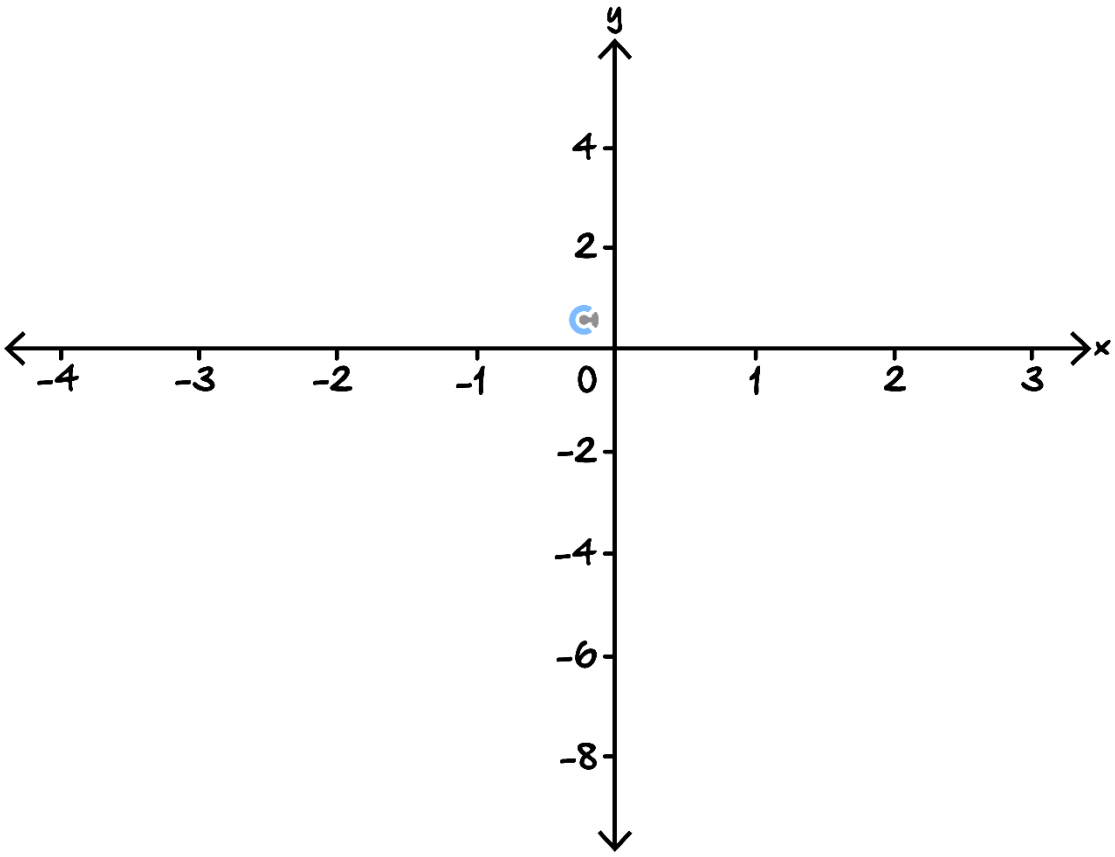
Question 73

Factorise and hence, sketch the graphs of each of the functions on the axes provided.

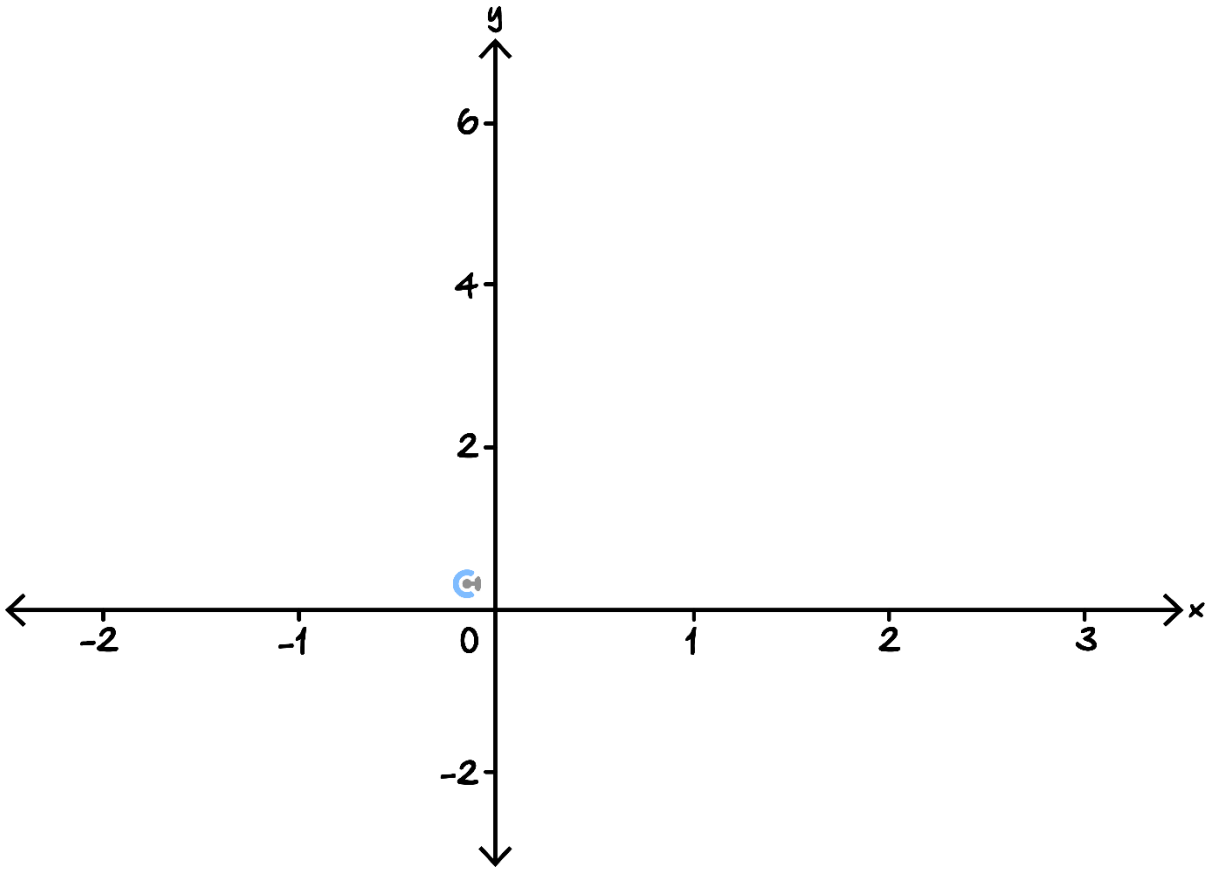
a. $y = x^3 - x^2 - 4x + 4$



b. $y = x^3 + 2x^2 - 5x - 6$



c. $y = x^4 - 2x^3 - 3x^2 + 4x + 4$

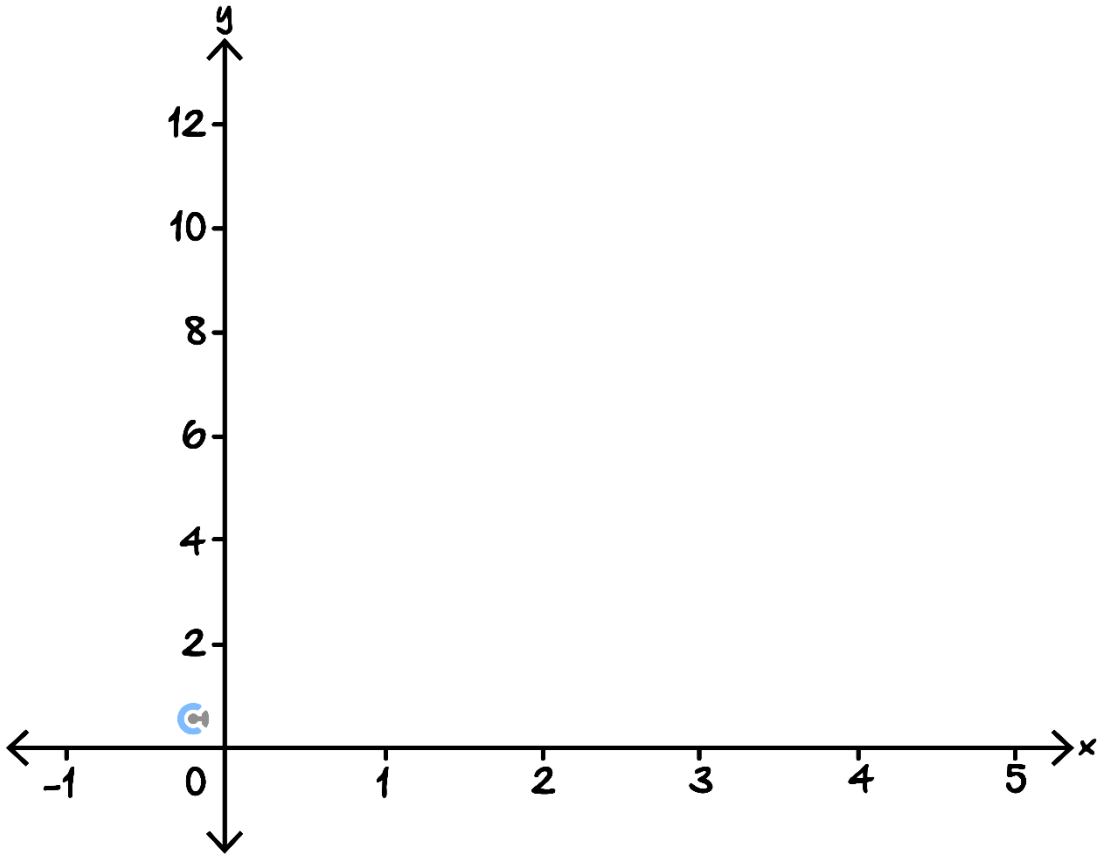


Space for Personal Notes

Question 74

Sketch the graph of $y = x^4 - 8x^3 + 22x^2 - 24x + 10$ on the axis below.

Hint: Factorise $x^4 - 8x^3 + 22x^2 - 24x + 9$ instead.



Space for Personal Notes

Section F: [1.6] – Polynomials Exam Skills (Checkpoints)

Sub-Section [1.6.1]: Solve Polynomial Inequalities

Question 75

Solve the following inequalities for x:

a. $x(x-1)(x+2) \leq 0$.

b. $(x-2)(x+1)(x+3) > 0$.

Space for Personal Notes

Question 76

Solve the following inequalities for x:

a. $(x-5)(x^2+x-2) \leq 0$.

b. $(1-x)(x^2-4x+4) \geq 0$.

Space for Personal Notes

Question 77

Solve the following inequalities for x:

a. $x^3 - 5x^2 - 8x + 12 > 0$.

b. $-x^3 + 4x^2 + x - 4 \leq 0.$

Question 78

Solve the inequality $4x^5 - 16x^4 + 13x^3 - 3x^2 > 4x^3 - 16x^2 + 13x - 3.$

Space for Personal Notes

Sub-Section [1.6.2]: Solve Number of Solution Problems

Question 79

Find the values of k, for which the equation $x(x^2 + 4) = 4kx^2$ has:

a. 1 solution.

b. 2 solutions.

c. 3 solutions.

Question 80

Find the values of k, for which the equation $kx^9 + 2x^6 + x^3 = 0$ has:

a. 1 solution.

b. 2 solutions.

c. 3 solutions.

Space for Personal Notes

Question 81

Find the values of k, for which the equation $x(x-2k-2)(x^2+kx+4) = -x^2-kx-4$ has:

a. 4 solutions.

b. 3 solutions.

c. 2 solutions.

d. 1 solution.

e. No solutions.

Space for Personal Notes

Question 82

Consider the polynomial $P(x) = x^3 + ax + b$.

Show that if $\Delta = -4a^3 - 27b^2 = 0$, that $P(x) = 0$ has less than 3 solutions.

Hint: If r_1, r_2, r_3 are the roots of $P(x)$, show that $\Delta = (r_1 - r_2)^2(r_2 - r_3)^2(r_3 - r_1)^2$.

Please use a calculator.

Space for Personal Notes

Sub-Section [1.6.3]: Apply Bisection Method to Approximate x-Intercepts

Question 83 CAS-Active.

Use the bisection method to find the approximate real solution to the equation $x^3 + 2x^2 - 5x + 3 = 0$. Use the interval $[-4, -3]$ for the first iteration and a maximum error of 0.1. Give your approximation correct to two decimal places.

Question 84 CAS-Active.

Use the bisection method to find the approximate real solution to the equation $x\log_2(x) + 3x = 4$. Use the interval $[0.1,2]$ for the first iteration and a maximum error of 0.01. Give your approximation correct to two decimal places.

Question 85 CAS-Active.

Use the bisection method to approximate π correct to three decimal places.

Question 86

Explain why you cannot use the bisection method to approximate the solution to the equation $x^4 - 2x^2 + 1 = 0$.

Space for Personal Notes

Section G: [1.1 - 1.6] – Exam 1 Overall

Question 87

Let the coordinates of the point X be (a, b). Find the coordinates of X', which is the point on X reflected across the lines $x = 1$ and $y = -3$. Give your answer in terms of a and b.

Question 88

Find the equation of the line that is parallel to $y = -3x - 4$ and passes through the point $(7, 5)$.

Space for Personal Notes

Question 89

Solve the simultaneous linear equations:

$$\frac{2}{3}x + \frac{1}{2}y = 4,$$

$$\frac{5}{4}x - \frac{5}{4}y = -\frac{5}{4}.$$

Question 90

Consider the functions $f(x) = 2x + 3$ and $g(x) = (x + 2)^2$.

a. Find the vertical distance between f and g, when $x = 2$.

b. Find the horizontal distance between f and g, when $y = 4$.

c. Find the distance between the point $(2, 4)$ and $g(x)$, when $x = 14$.

Question 91

Consider the simultaneous linear equations:

$$\frac{m}{3}x - y = m,$$

$$4x + my = -7,$$

Where m is a real constant.

a. Find the values of m for which there is a unique solution to the simultaneous equations.

b. If possible, determine the value(s) of m for which there are infinitely many solutions.

c. If possible, determine the value(s) of m for which there are no solutions.

Space for Personal Notes

Question 92

Cam is standing at the point $(1, 6)$ when a bus goes past him. The bus' path is described by the line $2y - 3x = 4$. Find the shortest distance between Cam and the bus.

Space for Personal Notes

Question 93 (4 marks)

a. For what values of x is $x^2 - 7x + 12 > 0$? (2 marks)

b. For what values of x is $1 - \frac{1}{x} - \frac{12}{x^2} > 0$? (2 marks)

Space for Personal Notes

Question 94 (3 marks)

The sum of the age of a son and his father is 35 years and the product is 150. Find their ages.

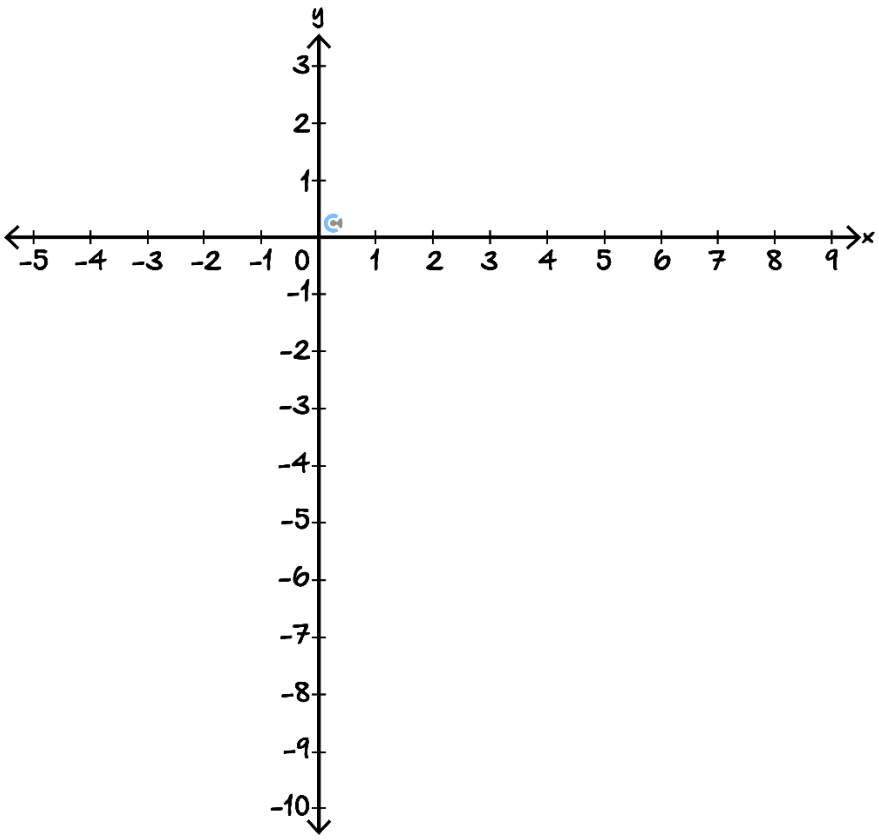
Space for Personal Notes

Question 95 (4 marks)

Consider the function $f(x) = x^2 - 4x - 5$.

a. Solve the equation $f(x) = 0$. (1 mark)

b. Sketch the graph of $y = f(x)$ on the axes below. Label the turning point and all axes intercept with coordinates. (2 marks)



c. Hence, find the value(s) of x such that $f(x) + 5 < 0$. (1 mark)

Question 96 (2 marks)

Solve the inequality $x^2 - 6x - 7 \leq 0$.

Space for Personal Notes

Question 97 (3 marks)

Consider the function $f(x) = kx^2 - 4x + 6$, where k is a real number. Find all possible values of k if $f(x)$ is always greater than 1.

Space for Personal Notes

Question 98 (5 marks)

Consider the function $f(x) = x^2 - kx - 4$, where k is a real number.

a. Show that the graph $y = f(x)$ always has two x-intercepts. (1 mark)

b. Find the values of k such that the distance between the two x-intercepts is less than 6. (3 marks)

c. Find the minimum possible distance between the two x-intercepts. (1 mark)

Space for Personal Notes

Question 99

Consider the polynomial $f(x) = x^3 - 7x + 6$.

a. Show that $f(1) = 0$.

b. Solve $f(x) = 0$ for x.

c. Hence, solve $f(x) \geq 0$ for x.

Space for Personal Notes

Question 100

For what values of k does the equation $k(x^3 + x^2) = x$ have exactly one solution.

Question 101

Consider the polynomial $f(x) = x^3 - 3x^2 + x + 1$.

a. Fully factorise $f(x)$ into linear factors.

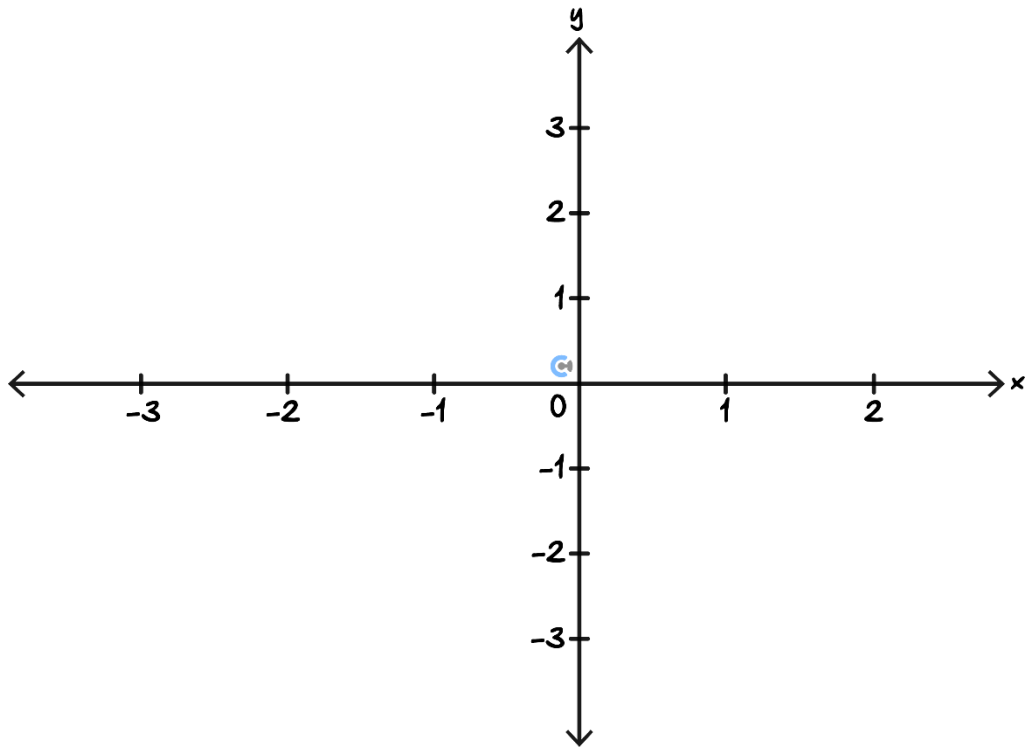
b. A bisection method is used to solve $f(x) = 0$ with the first interval being $[2,3]$.
Use the fact that $\sqrt{2} \approx 1.4$ to write down the next 3 intervals.

Question 102

Let $f(x) = x^4 + 3x^3 + x^2 - 3x - 2$.

a. Show that $x^2 - 1$ is a factor of f.

b. Sketch the graph of $y = f(x)$ on the axis below. Label all axis intercepts with their coordinates.
Note that some turning points occur at $(-1.69, -0.40)$ and $(0.44, -2.83)$.



Space for Personal Notes

Question 103 (5 marks)

Let P be a point on the straight line $y = 2x - 4$ such that the length of OP, the line segment from the origin O to P, is a minimum.

a. Find the coordinates of P. (3 marks)

b. Find the distance OP. Express your answer in the form $\frac{a\sqrt{b}}{b}$, where a and b are positive integers. (2 marks)

Space for Personal Notes

Question 104

Consider the simultaneous linear equations:

$$kx - 3y = k + 3$$

$$4x + (k + 7)y = 1$$

Where k is a real constant.

a. Find the value of k for which there are infinitely many solutions.

b. Find the values of k for which there is a unique solution.

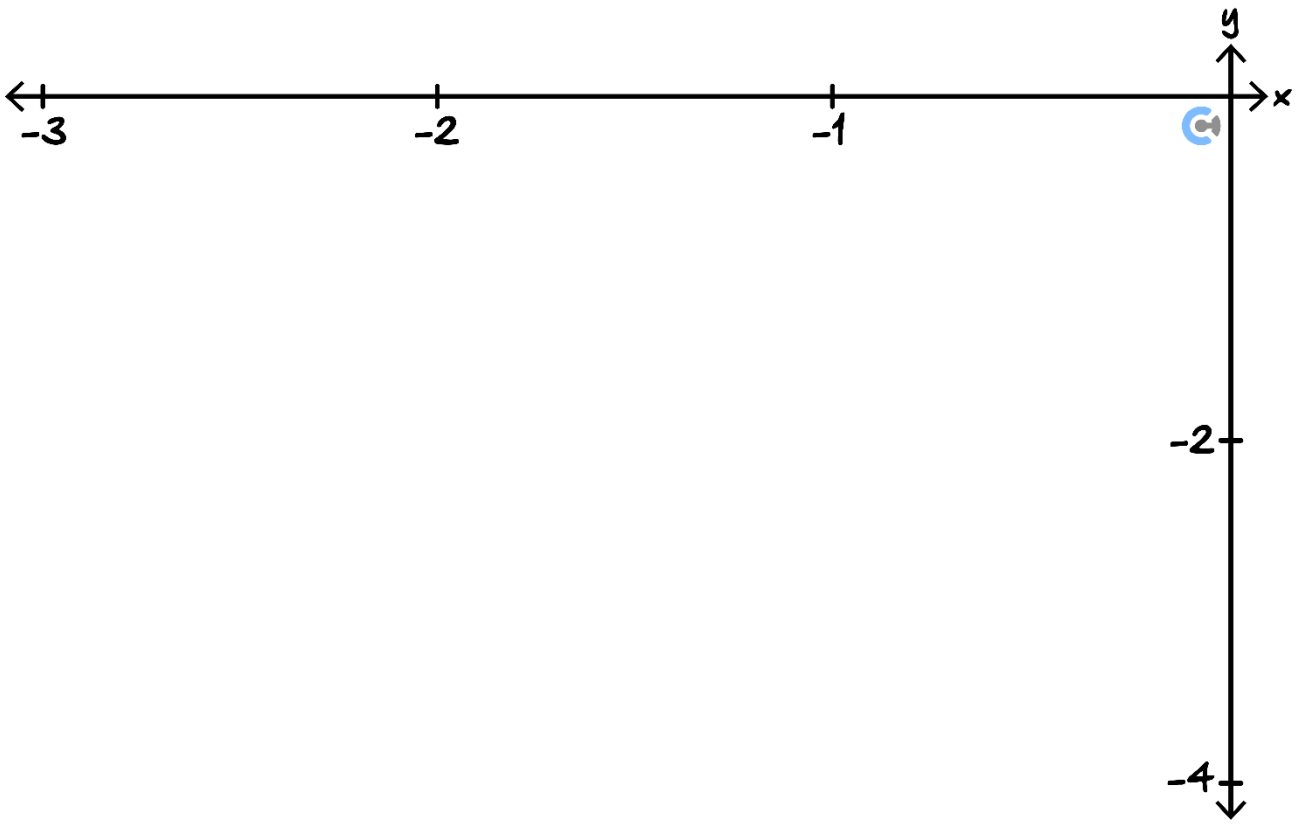
Space for Personal Notes

Question 105 (4 marks)

Let $f: [-3,0] \to R, f(x) = (x+2)^2(x-1)$.

a. Show that $(x+2)^2(x-1) = x^3 + 3x^2 - 4$.

b. Sketch the graph of f on the axes below. Label the axis intercept and any stationary points with their coordinates.



Space for Personal Notes

CONTOUREDUCATION

Website: contoureducation.com.au | **Phone:** 1800 888 300 | **Email:** hello@contoureducation.com.au

VCE Mathematical Methods ½

Free 1-on-1 Support

Be Sure to Make The Most of These (Free) Services!

- Experienced Contour tutors (45+ raw scores, 99+ ATARs).
- For fully enrolled Contour students with up-to-date fees.
- After school weekdays and all-day weekends.

1-on-1 Video Consults	Text-Based Support
Book via bit.ly/contour-methods-consult-2025 (or QR code below). One active booking at a time (must attend before booking the next).	Message +61 440 138 726 with questions. Save the contact as "Contour Methods".

Booking Link for Consults
bit.ly/contour-methods-consult-2025

Number for Text-Based Support
+61 440 138 726