

SCRIBBLE WORKS PUBLISHING HOUSE

**THE SECOND ASSIGNMENT
MATHS WORKBOOK**

ANSWER BOOKLET

**FINAL ANSWERS
CHARTS
TABLES &
GRAPHS**

UNIT 1

STATISTICS

ACTIVITY 1.1

- a) Examinations results, ages and attendance of pupils
- b) Weight of patients; gender of patients; blood group types; number of doctors etc.
- c) Size of congregation; number of chairs; number of parents etc.
- d) Weight of club members; ages of club members and etc.
- e) Price of commodities; numbers of stores; gender of traders etc.

ACTIVITY 1.2

- a) 34 pupils
- b) 1 year
- c) 5 years
- d) 5 years
- e) 20 pupils

ACTIVITY 1.3

a)

Time in minutes (x)	Number of DECS (f)	fx
1	2	2
2	3	6
3	4	12
4	10	40
5	12	60
6	20	120
7	20	140
8	15	120
9	10	90
10	4	40
	$\Sigma f = 100$	$\Sigma fx = 630$

- b) i) 6.3
- ii) 6
- iii) Bi-modal 6 and 7
- c) 31%
- d) $\frac{29}{100}$

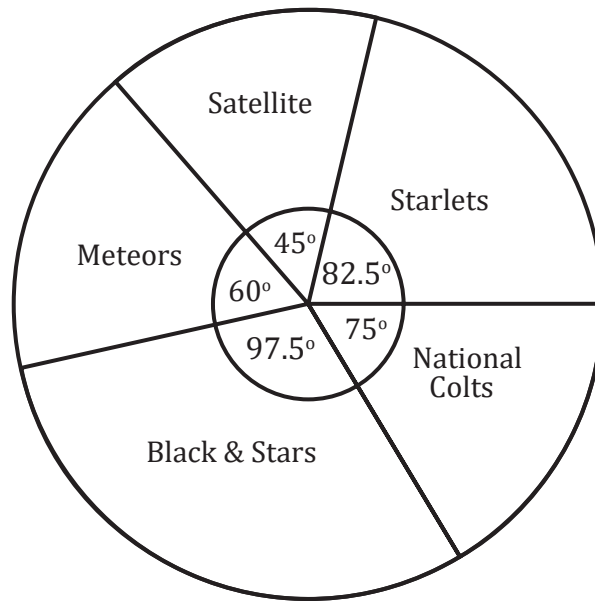
STATISTICS

ACTIVITY 1.4

- a) GH¢ 7,200
- b) 38.9%
- c) GH¢ 1,200
- d) $\frac{7}{36}$ and $\frac{1}{8}$ respectively

ACTIVITY 1.5

a) Total number of fans = 96



- b) $\frac{13}{48}$
- c) 21%

ACTIVITY 1.6

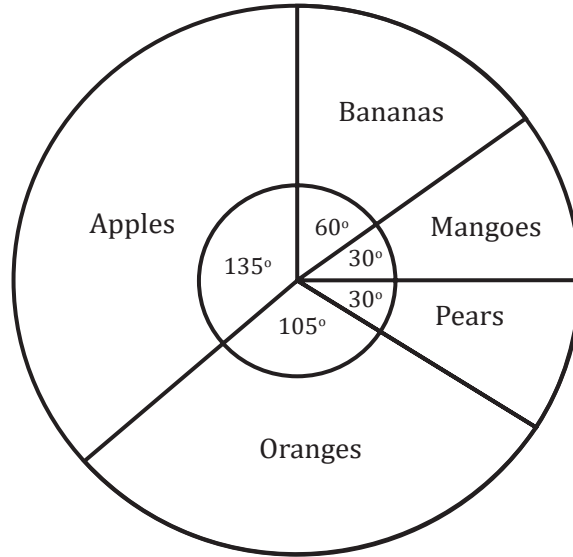
a)

Favorite Fruit			
Fruits	No of likes	Frequency	Angel of each sector
Mangoes	//	2	30°
Bananas	////	4	60°
Apples	### ////	9	135°
Oranges	### //	7	105°
Pears	//	2	30°
		Σf = 24	Σ = 360°

- b) 7

STATISTICS

c)



d) 5

ACTIVITY 1.7

a) 10

b) 20%

c)

Ages in years (x)	Tally	Number of boys (f)
11	///	3
12	### //	7
13	### /	6
14	////	4
15	### /	6
16	////	4
		$\Sigma f = 30$

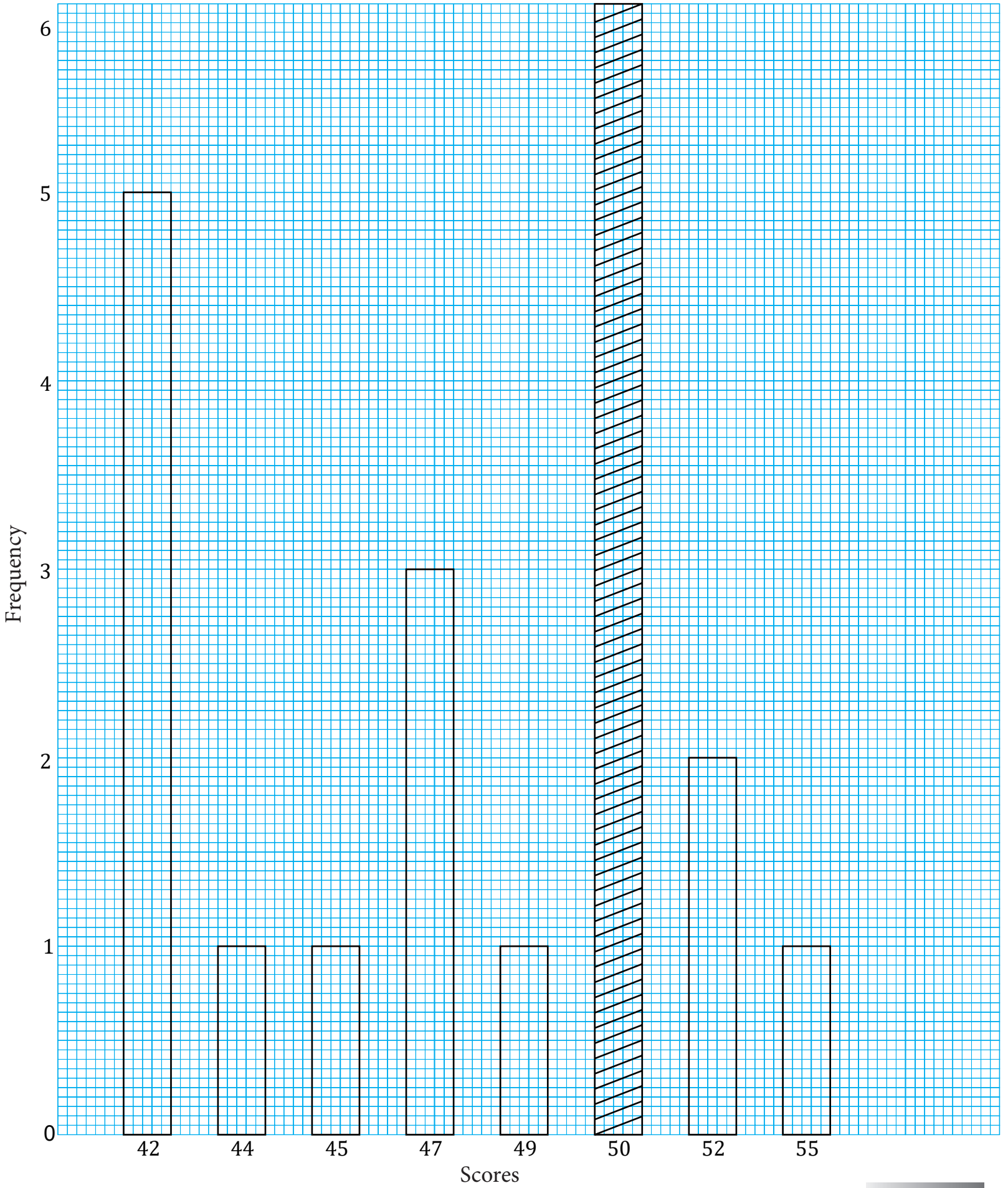
ACTIVITY 1.8

b)

Marks	Tally	Frequency (f)
42	###	5
44	/	1
45	/	1
47	///	3
49	/	1
50	### /	6
52	//	2
55	/	1
		$\Sigma f = 20$

c) 10

STATISTICS



STATISTICS

ACTIVITY 1.9

a)

Weight in kg (x)	Tally	Frequency (f)	fx
4	///	3	12
5	///	3	15
6	////	5	30
7	//	2	14
8	//	2	16
9	////	4	36
10	/	1	10
		$\Sigma f = 20$	$\Sigma fx = 133$

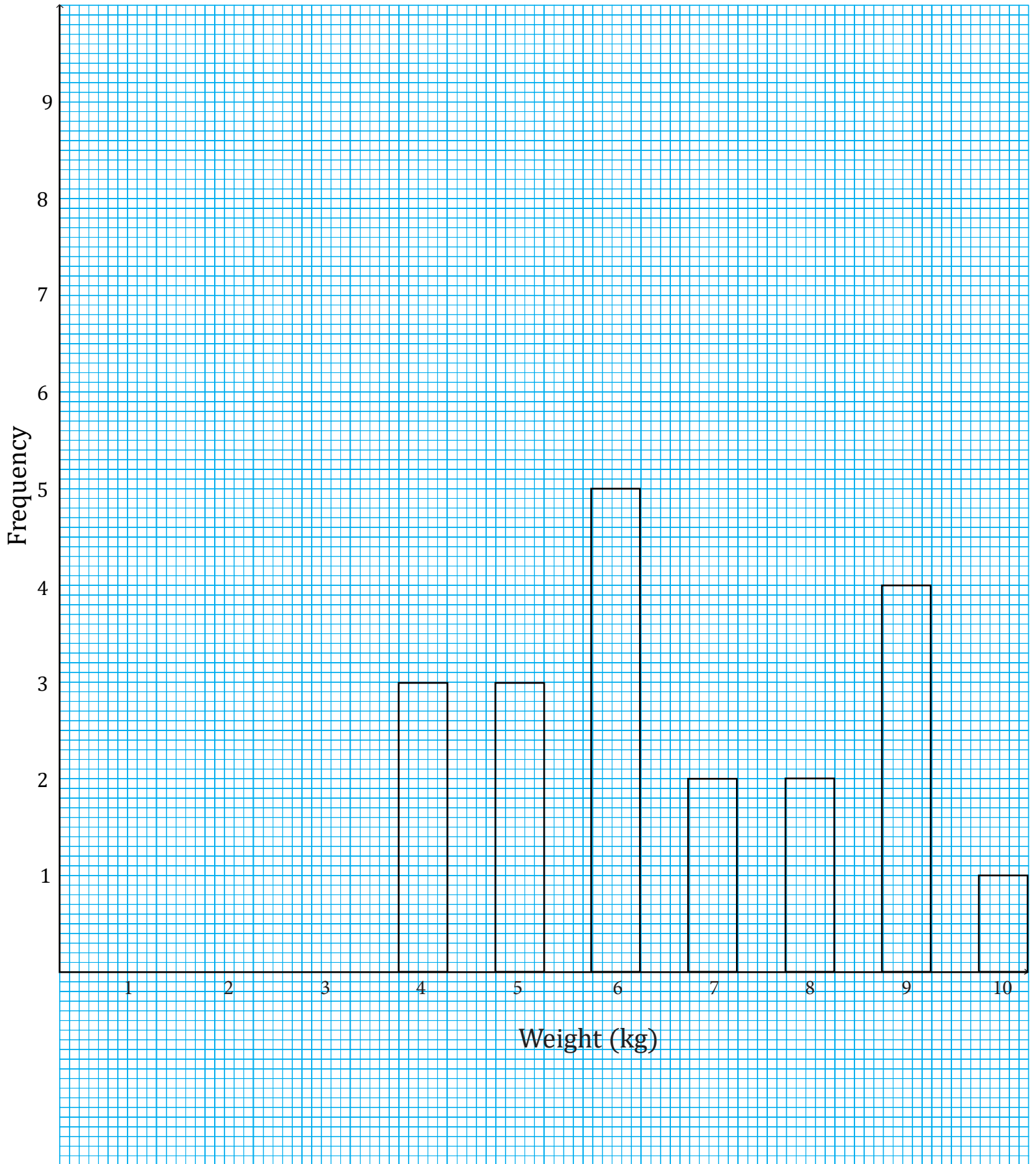
b) i) 6.65 kg

iii) 6.0 kg

c) 6 kg

ii) 6 kg

STATISTICS



STATISTICS

ACTIVITY 1.10

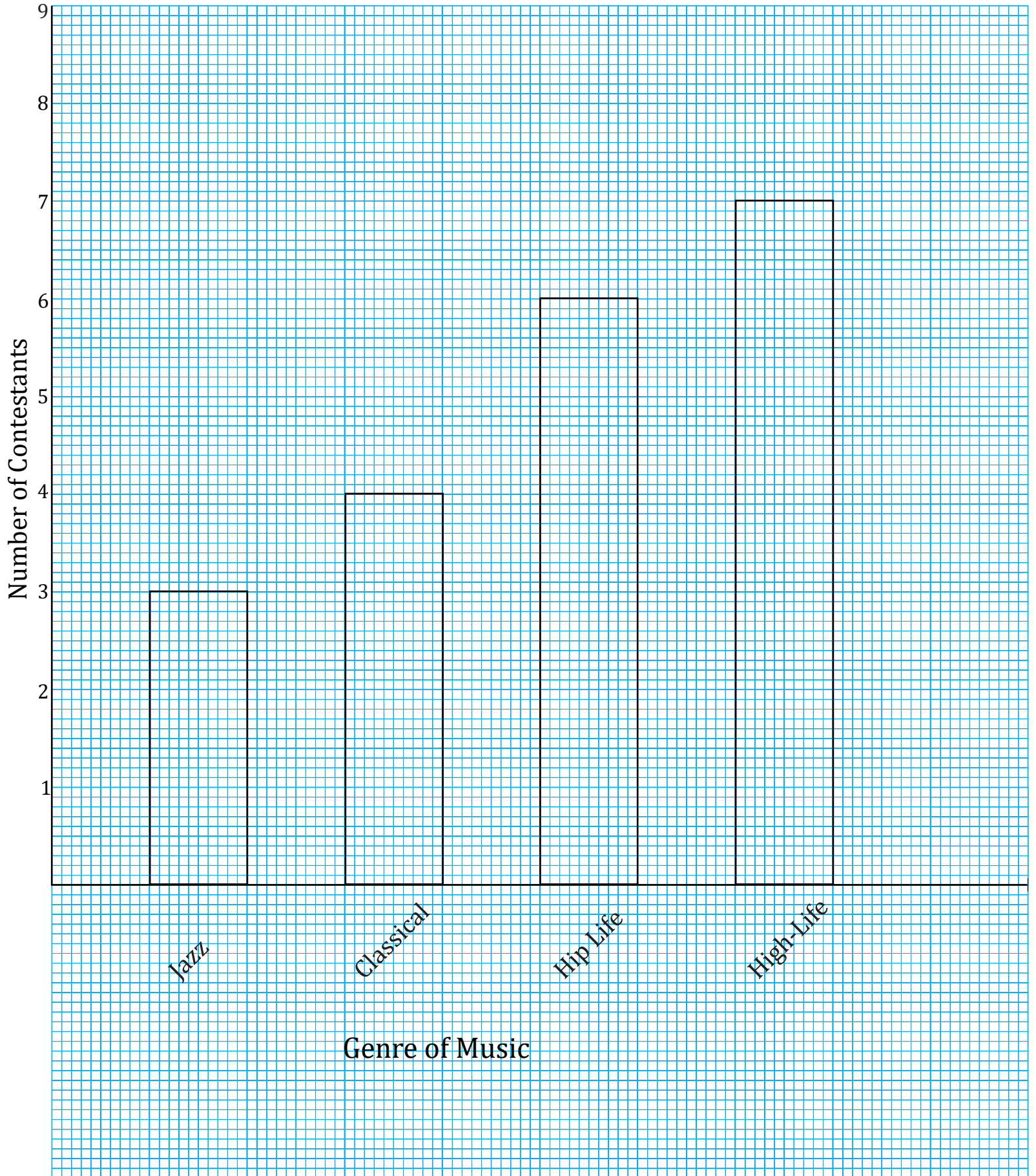
- a) 16
b) Yellow
c) $\frac{7}{16}$
d)

Color of School Bags	Tally	Number Of Students (f)
Reds	////	4
Yellow		0
Blue	### //	7
Green	/	1
Black	////	4
		$\Sigma f = 16$

ACTIVITY 1.11

- a) 4
b) 30%
c) $\frac{1}{2}$
d) Jazz

STATISTICS



STATISTICS

ACTIVITY 1.12

- a) Least score = 68; b) 88
 Greatest score = 95 c) 86

ACTIVITY 1.13

a)

Stem	Leaf
1	4 4 5 7 9
2	0 4 7 7
3	1 3

Key: 1 | 4 means 14

- b) i) 14 and 27 ii) 20 iii) 19

ACTIVITY 1.14

a)

Stem	Leaf
4	2 2 4 5 7 7 9
5	0 0 2 2 3 6 6 7 9 9 9 9
6	0 0 2 2 2 3

Key: 4 | 2 means 4.2

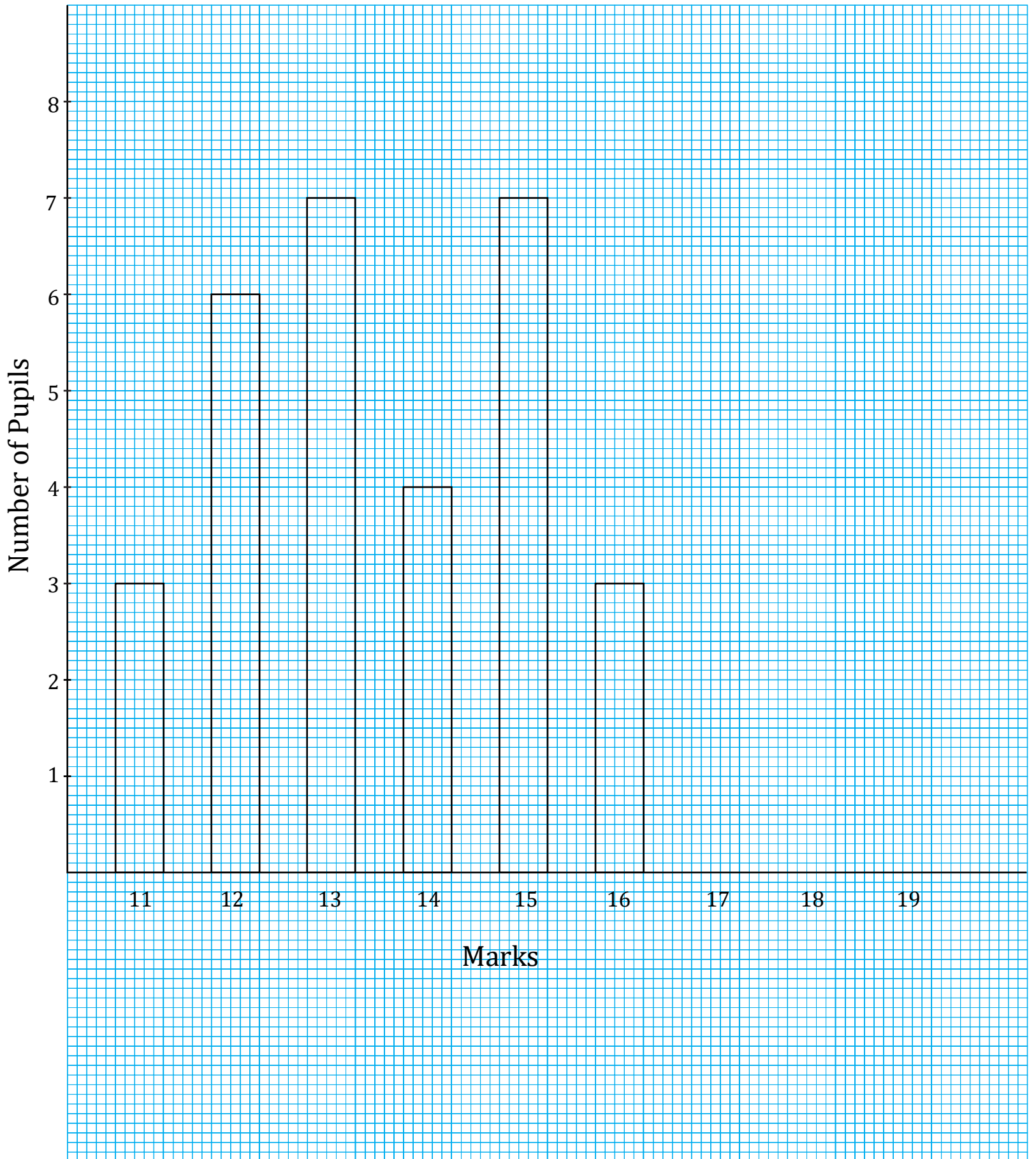
- b) 6.3
c) 5.9
d) 5.6

ACTIVITY 1.15

a)

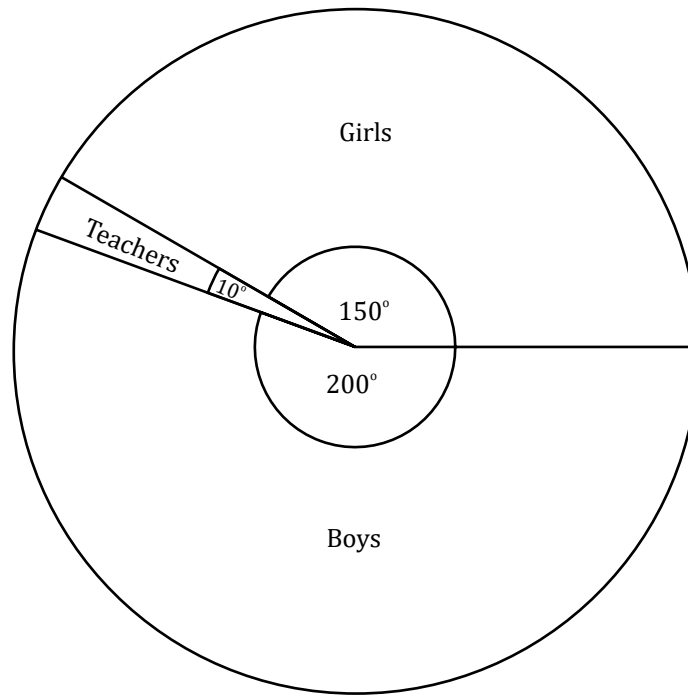
Marks (x)	Tally	Frequency (f)
11	///	3
12	//// /	6
13	//// //	7
14	////	4
15	//// //	7
16	///	3
		$\Sigma f = 30$

- b) 13 and 15 c) 10 pupils
d) 9 pupils



ACTIVITY 1.16

a)



- b) i) 5
- ii) 100
- iii) 42%
- c) 1:35

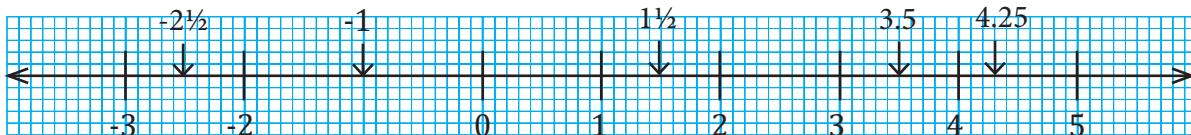
UNIT 2

RATIONAL NUMBERS

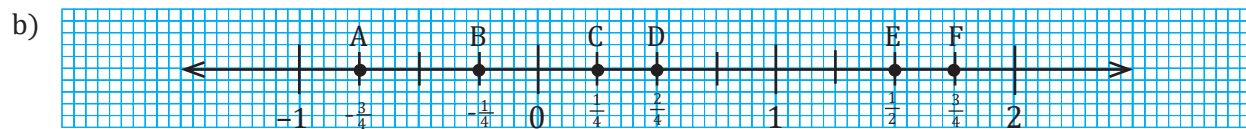
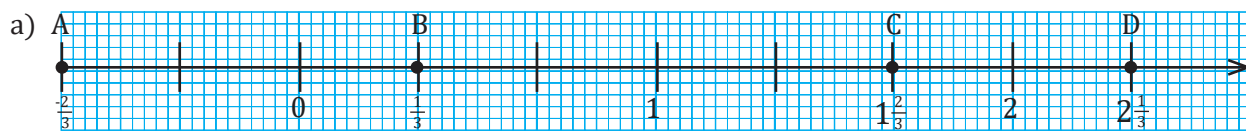
ACTIVITY 2.1

- | | |
|-------------------|--------|
| a) 4.151 | b) 48% |
| c) $-\frac{1}{2}$ | d) 0 |

ACTIVITY 2.2



ACTIVITY 2.3



ACTIVITY 2.4

- | | |
|-------------|---------------|
| a) Rational | b) Irrational |
| c) Rational | d) Irrational |
| e) Rational | f) Rational |

ACTIVITY 2.5

- | | |
|-------------------------|----------------------------------|
| a) $40\% > \frac{1}{2}$ | b) $-\frac{1}{3} < -\frac{1}{4}$ |
| c) $\frac{11}{2} > 1.2$ | d) $-2\frac{1}{2} > -3$ |
| e) $\sqrt{81} =$ | |

ACTIVITY 2.6

- | | |
|-------------------|-------------------|
| a) -2 | b) $11/4$ |
| c) $-\frac{3}{4}$ | d) $2\frac{3}{4}$ |

ACTIVITY 2.7

- | | |
|-------------------|-------------------|
| a) $3\frac{1}{2}$ | b) $-\frac{1}{4}$ |
| c) 12 | d) $\frac{3}{20}$ |

MAPPING

ACTIVITY 2.8

- a) -1
c) -6

- b) $\frac{1}{2}$
d) $-\frac{10}{13}$

ACTIVITY 2.9

a) $\frac{8}{9}$

b) $\frac{7}{24}$

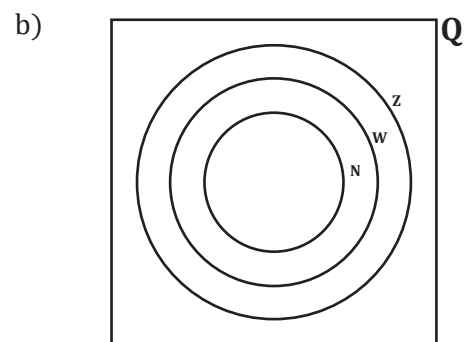
ACTIVITY 2.10

a) $\frac{1}{2}$

b) 54

ACTIVITY 2.11

- a) Q – Rational Numbers
N – Natural Numbers
W – Whole Numbers
Z – Integers



ACTIVITY 2.12

1) $\frac{1}{3} > \frac{1}{4}$

2) $\frac{2}{4} = \frac{2}{4}$

3) $\frac{3}{4} > \frac{3}{5}$

4) $\frac{3}{5}, \frac{2}{3}, \frac{1}{5}$

5) $\frac{3}{4}, \frac{2}{3}, \frac{5}{8}$

6) $\frac{1}{2}$ dozens red pencils, $\frac{2}{3}$ dozen blue pencils, $\frac{3}{4}$ dozen green pencils.

8) $\frac{13}{2}$

9) $\frac{15}{4}$

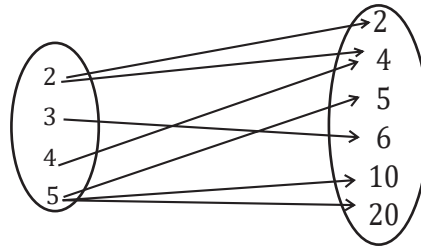
10) $\frac{3}{2}$

UNIT 3

MAPPING

ACTIVITY 3.1

1) a)



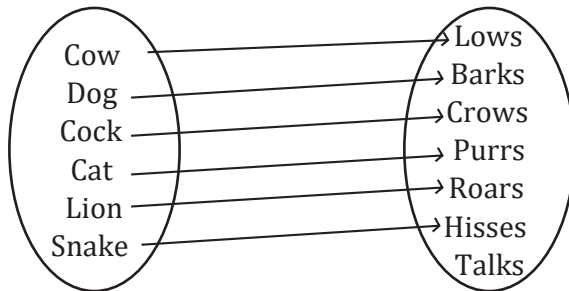
b) $\{(2,4), (3,6), (4,8), (5,10), (5,15)\}$

2) Sets B and C do not define a relation.

ACTIVITY 3.2

a) Creature \rightarrow Sound it makes

b)

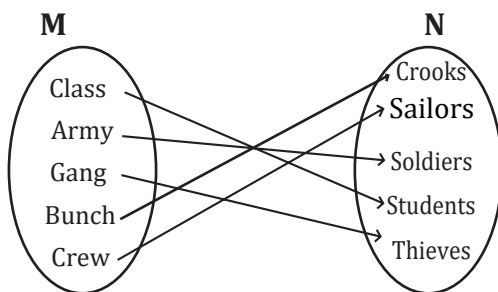


c) i) The domain: {cow, dog, cock, cat, lion, snake}

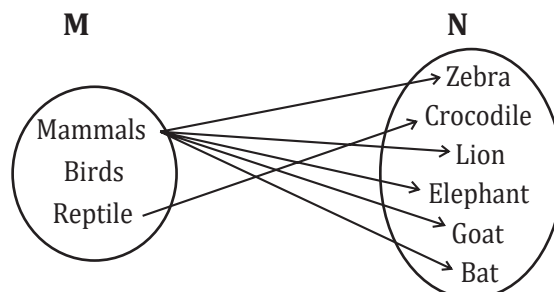
ii) The range: {lows, barks, crows, purrs, roars, hisses}

ACTIVITY 3.3

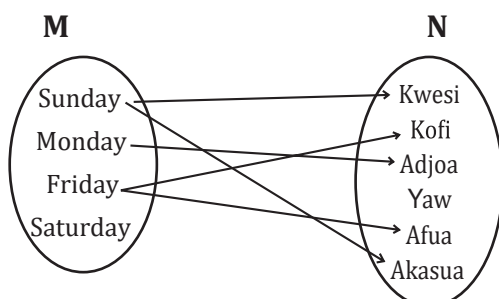
a) One-to-one relation



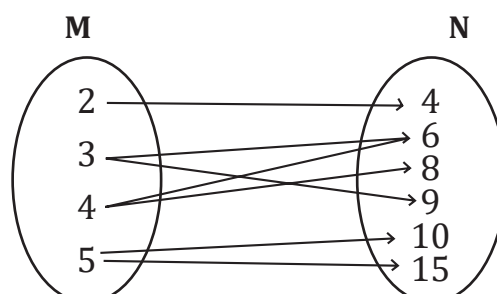
b) One-to-many relation



c) One-to-many relation



d) Many-to-many relation



LINEAR EQUATIONS INEQUALITIES

ACTIVITY 3.4

- 1) a) Many-to-one
 b) Many-to-many
 c) One-to-many
- 2) a) $\{(e, w), (f, x), (f, y), (g, z)\}$
 b) $\{(1, 10), (2, 10), (2, 20), (3, 12), (3, 15), (4, 12), (4, 20)\}$

ACTIVITY 3.5

- a) $x - 2x + 1$ or $y = 2x + 1$
 b) $x \rightarrow \frac{x}{2}$ or $y = \frac{x}{2}$

ACTIVITY 3.6

- a) $x \rightarrow 2x + 2$ or $y = 2x + 2$
 b) $x \rightarrow 2x - 6$ or $y = 2x - 6$

ACTIVITY 3.7

- a) $x \rightarrow 2^{x-1}$ or $y = 2^{x-1}$
 b) $x \rightarrow 3^x$ or $y = 3^x$

ACTIVITY 3.8

- a) $x \rightarrow \frac{x-4}{2}$ or $y = \frac{x-4}{2}$
 b) $x \rightarrow \frac{x+2}{3}$ or $y = \frac{x+2}{3}$
 c) $x \rightarrow \frac{x+2}{2}$ or $y = \frac{x+2}{2}$
 d) $x \rightarrow \frac{x+2}{2}$ or $y = \frac{x+2}{2}$

ACTIVITY 3.9

a)

x	- 2	- 1	0	1	2
$5x$	- 10	- 5	0	5	10

b)

x	- 2	- 1	0	1	2
$10/x$	- 5	- 10	<i>undefined</i>	10	5

c)

x	- 2	- 1	0	1	2
$3x^2 + 1$	13	4	1	4	13

d)

x	- 2	- 1	0	1	2
$3(x^2 - 1)$	- 9	0	3	0	- 9

UNIT 4

LINEAR EQUATIONS INEQUALITIES

ACTIVITY 4.1

- | | |
|-------------------|------------------|
| a) $14x = 28$ | b) $x - 10 = 2x$ |
| c) $3 - x = 7$ | d) $4 + x = 24$ |
| e) $2(x - 2) = 6$ | |

ACTIVITY 4.2

- Three times a number is twelve
- Two times a certain number minus ten is four
- When a certain number is added to three and the result is multiplied by five, the final answer is 25
- When eight is added to a certain number, the result is negative one.
- When one is added to a certain number divided by two, the result is one divided by three.

ACTIVITY 4.3

- | | |
|-------|-------|
| a) 2 | b) -2 |
| c) -5 | d) 12 |

ACTIVITY 4.4

- | | |
|------|--------------------|
| a) 3 | b) $-\frac{12}{5}$ |
| c) 0 | d) 1 |

ACTIVITY 4.5

- | | |
|------|------|
| a) 3 | b) 3 |
| c) 5 | d) 2 |

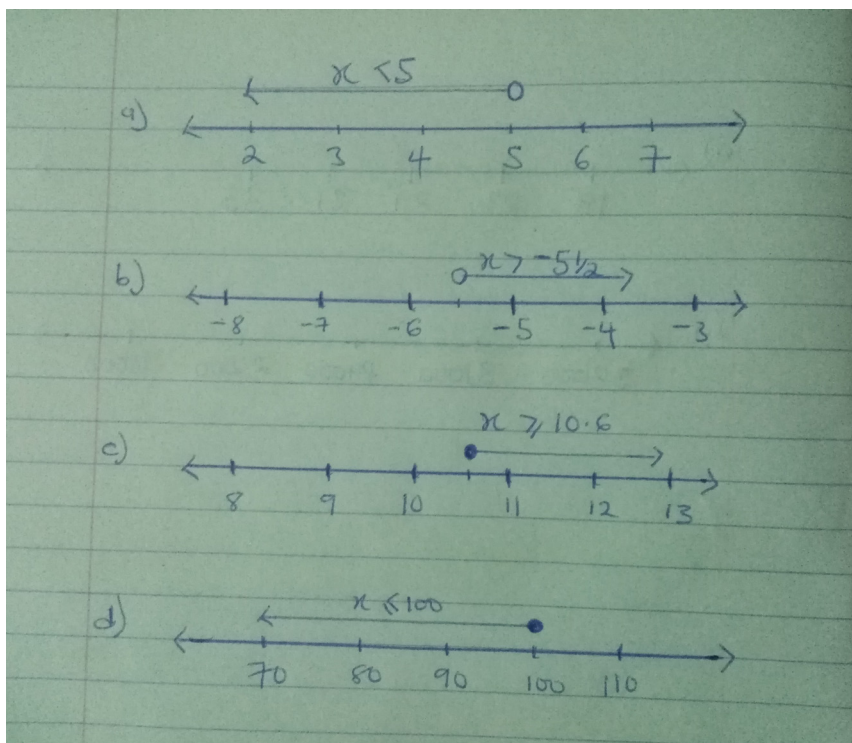
ACTIVITY 4.6

- | | |
|--------|-------|
| a) -12 | b) -3 |
|--------|-------|

ACTIVITY 4.7

- | | |
|---------------------------------------|-----------------------------|
| a) $-2x > 6$ | b) $2m + 4 < m - 1$ |
| c) $x - \frac{1}{5} \geq \frac{1}{5}$ | e) $\frac{25+41+x}{3} > 45$ |

ACTIVITY 4.8



ACTIVITY 4.9

b) $x \leq -2$

c) $x < 0$

d) $5 < x \leq 30$

ACTIVITY 4.10

a) $b < 2$

b) $20 < a$

c) $x \geq \frac{21}{2}$

e) $x \geq -\frac{1}{2}$

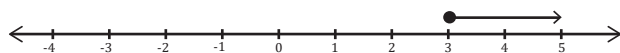
ACTIVITY 4.11

a) $\{x : x \leq 3\}$

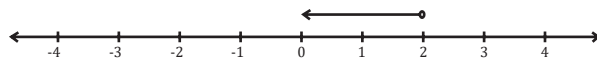
b) $\{x : x < \frac{9}{2}\}$

ACTIVITY 4.12

a) $\{x : x \geq 3.11\}$



b) $\{x : x \leq 2\}$



LINEAR EQUATIONS INEQUALITIES

ACTIVITY 4.13

a) $\{x : x = 4\frac{1}{2}\}$

b) $\{x : x = -1, -1\frac{1}{2}\}$

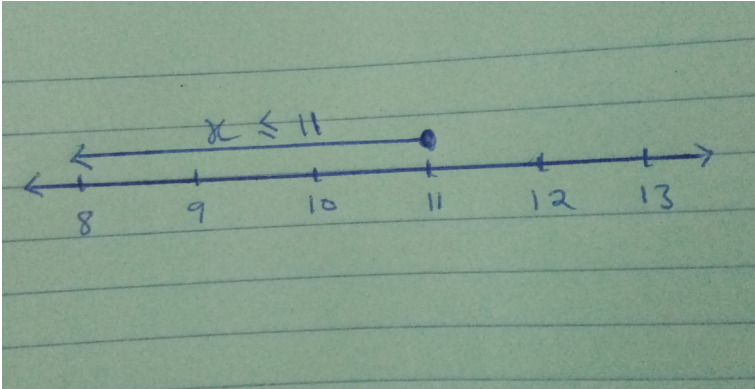
ACTIVITY 4.14

a) $-\frac{2}{3}$

b) 16

c) 21 and 14 years respectively

d) $x \leq 11$



UNIT 5

ANGLES

ACTIVITY 5.1

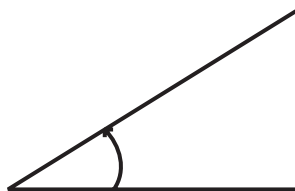
- a) 105°
- b) 120°
- c) 18°
- d) 315°

ACTIVITY 5.2

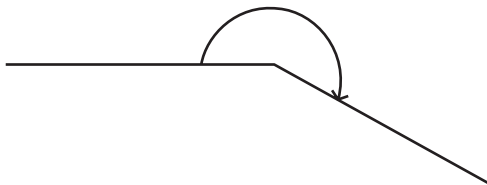
- a) 50°
- b) 177°
- c) 120°
- d) 90°

ACTIVITY 5.3

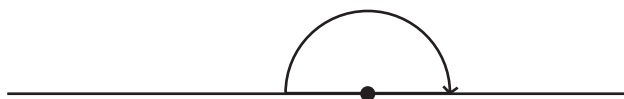
- a) An acute angle is an angle less than 90°



- b) A reflex angle is an angle between 180° and 360°



- c) A straight angle is an angle of 180°



- d) An obtuse angle is an angle between 90° and 180°



- e) A right angle is an angle of 90°



ANGLES

ACTIVITY 5.4

- a) $a = 60^\circ; b = 60^\circ; c = 60^\circ$; sum of angles = 180°
- b) $\angle ABC = 45^\circ; \angle BCA = 45^\circ; \angle CAB = 90^\circ$; sum of angles = 180°
- c) $a = 65^\circ; b = 50^\circ; c = 65^\circ$; sum of angles = 180°
- d) $\angle ABC = 75^\circ; \angle BCA = 45^\circ; \angle CAB = 60^\circ$; sum of angles = 180°

ACTIVITY 5.5

- a) 95°
- b) $x = 53^\circ, y = 57^\circ$
- c) 25.7°
- d) $a = 80^\circ, b = 28^\circ$

ACTIVITY 5.6

- a) $a = 110^\circ; b = 70^\circ; c = 110^\circ; d = 70^\circ$
- b) $x = 60^\circ; y = 120^\circ$
- c) $m = 62^\circ; n = 118^\circ$
- d) $a = 90^\circ; b = 153^\circ; c = 49^\circ$

ACTIVITY 5.7

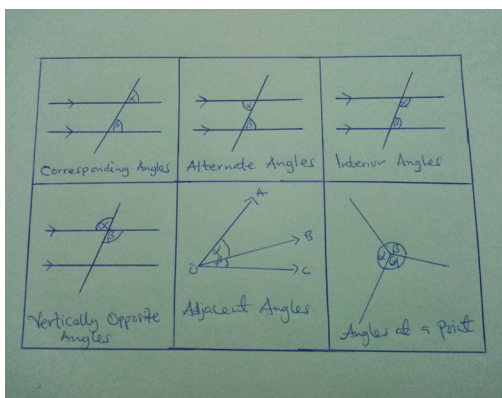
- a) $x = 125^\circ$
- b) $a = 130^\circ; b = 50^\circ; c = 130^\circ; e = 130^\circ$

ACTIVITY 5.8

- a) $y = 100^\circ; x = 38^\circ$
- b) $a = 80^\circ; b = 130^\circ; c = 90^\circ$

ACTIVITY 5.9

- 1) Properties of a triangle;
 - Has 3 sides
 - Has 3 internal angles
 - Sum of its internal angles is 360°



- 3) 30° and 60°
- 4) $y = 316^\circ$

UNIT 6

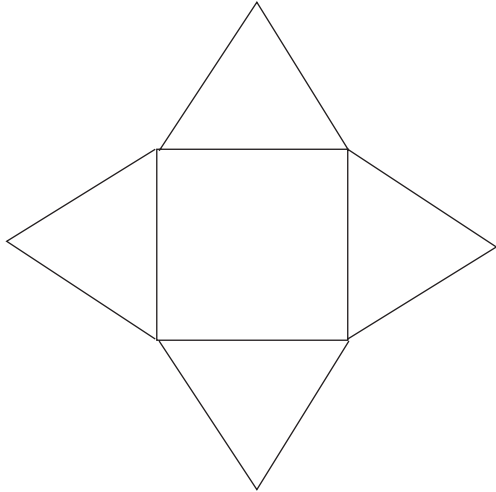
SHAPE AND SPACE

ACTIVITY 6.1

- a) Triangular prism
- b) Cube
- c) Cylinder
- d) Triangular pyramid

ACTIVITY 6.2

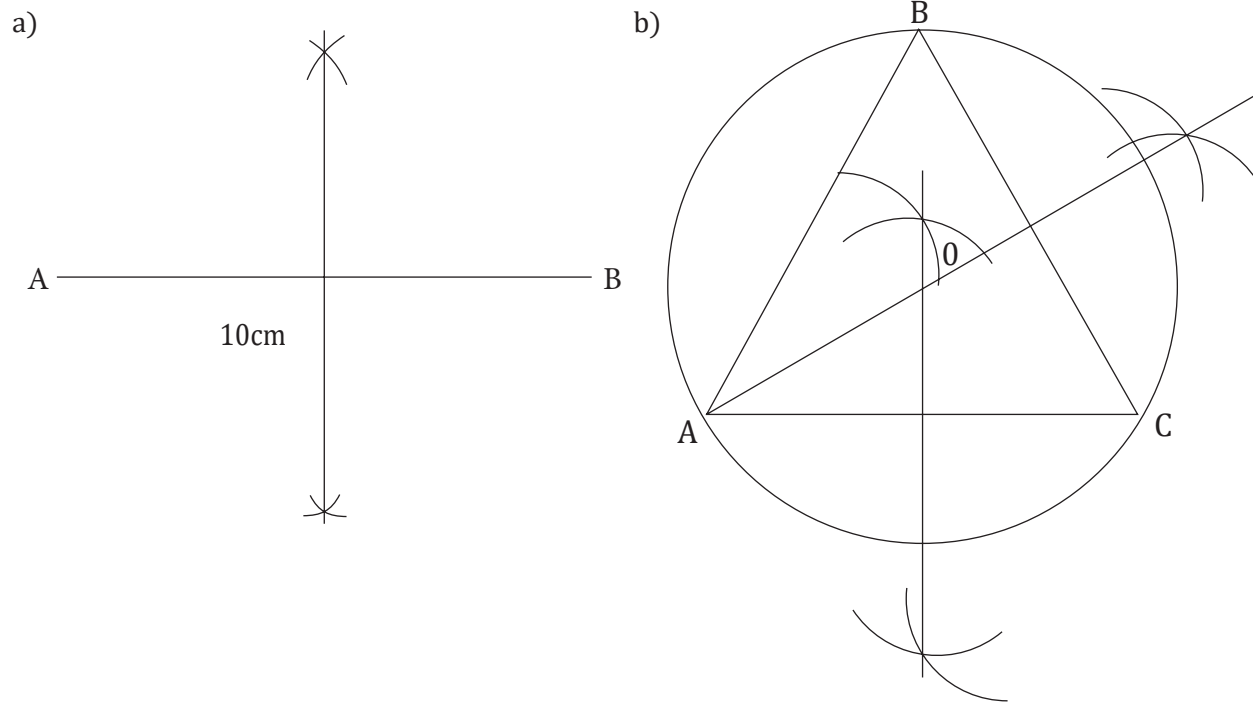
1)



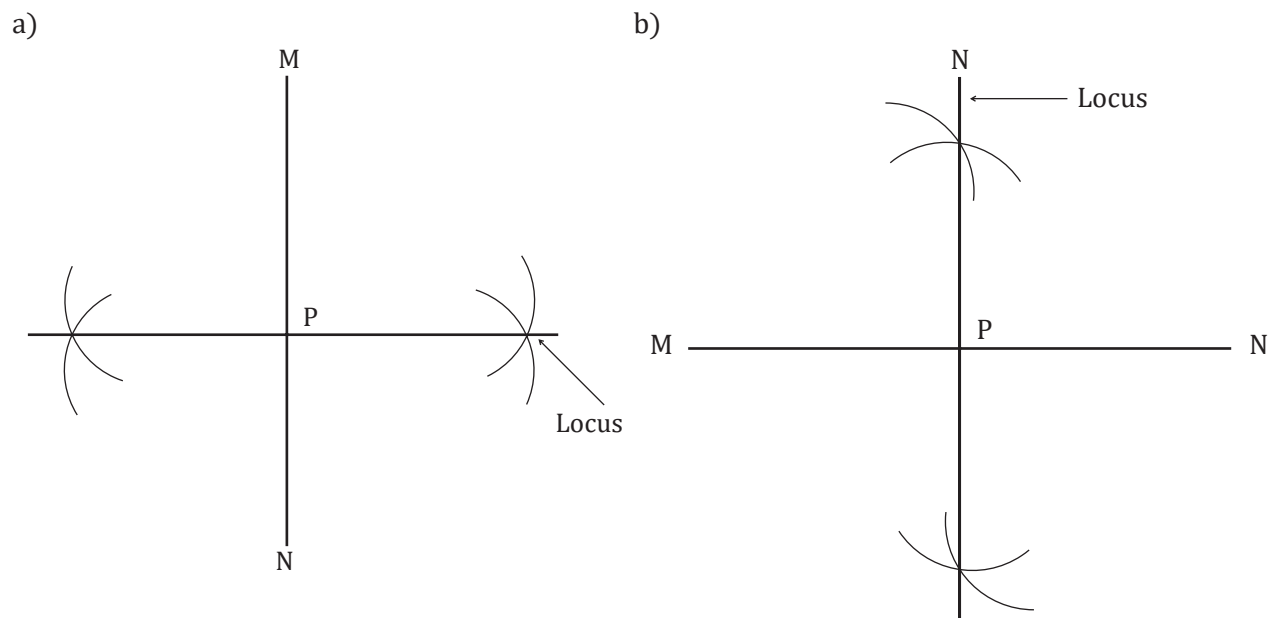
UNIT 7

GEOMETRIC CONSTRUCTIONS

ACTIVITY 7.1



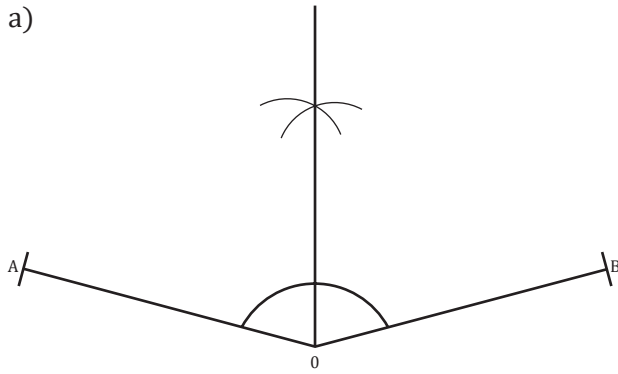
ACTIVITY 7.2



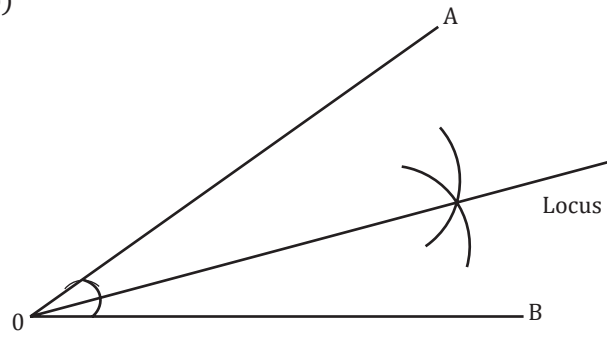
GEOMETRIC CONSTRUCTIONS

ACTIVITY 7.3

a)

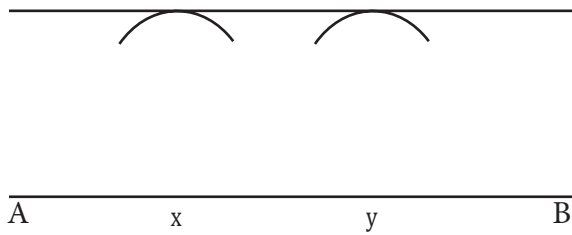


b)

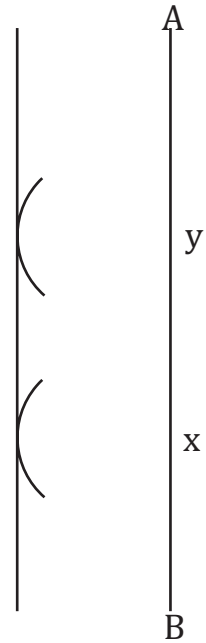


ACTIVITY 7.4

a)

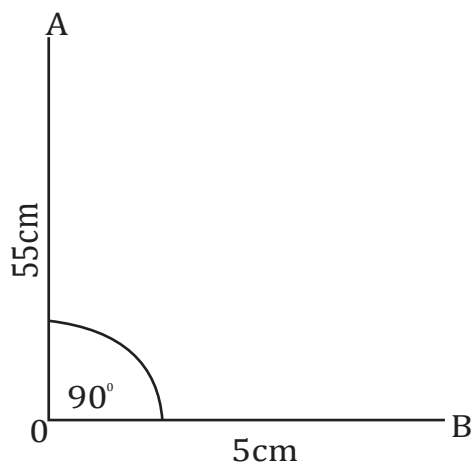


b)

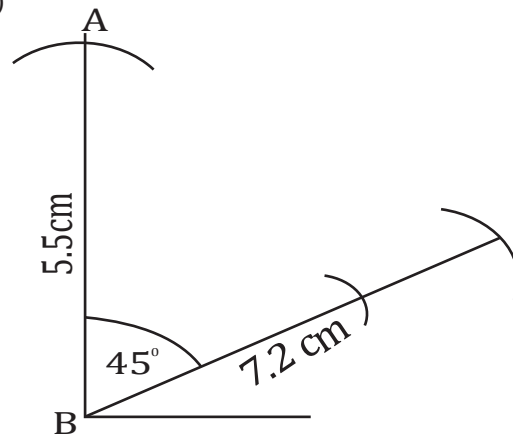


ACTIVITY 7.5

a)

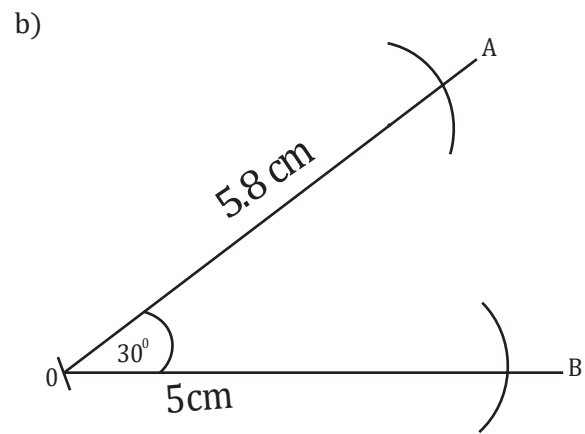
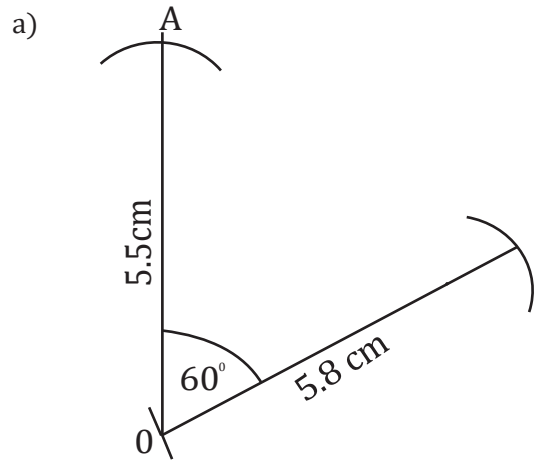


b)

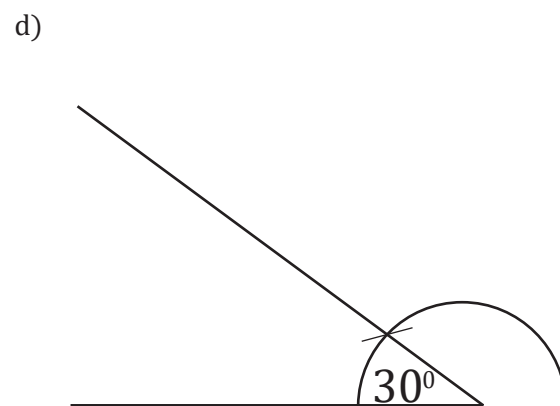
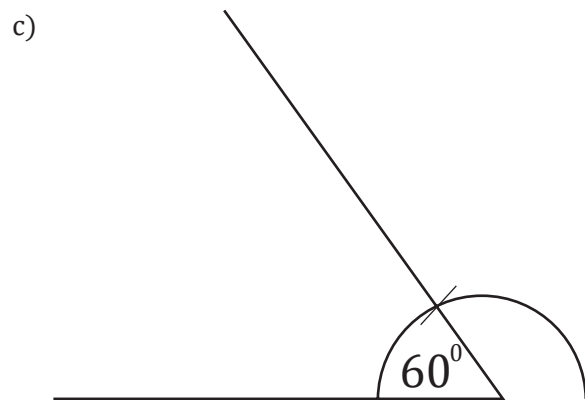
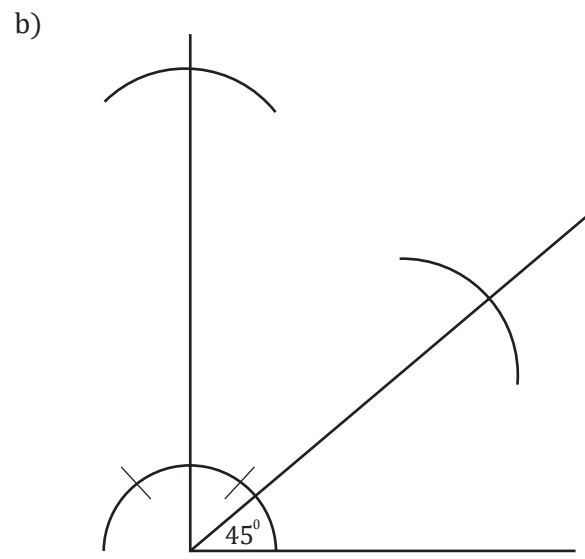
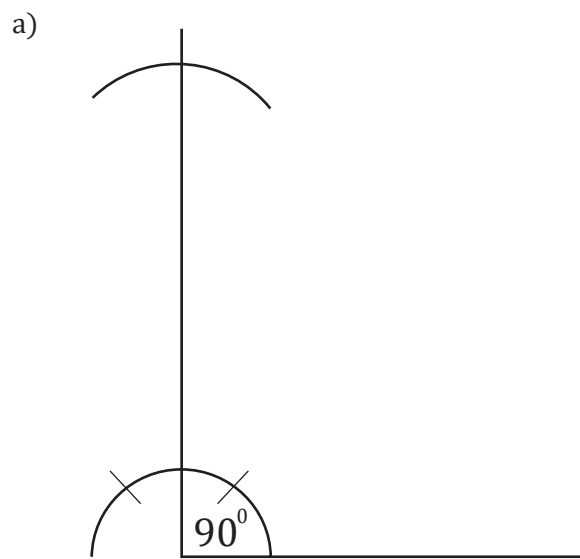


GEOMETRIC CONSTRUCTIONS

ACTIVITY 7.6



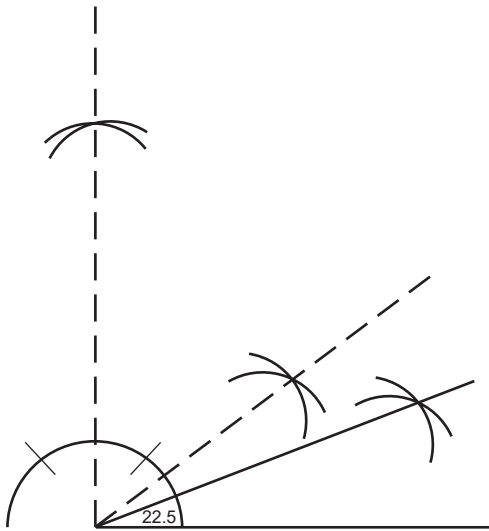
ACTIVITY 7.7



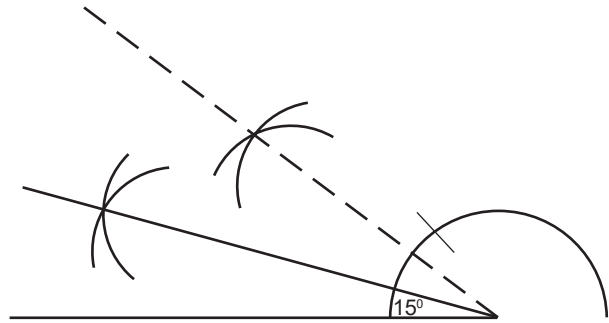
GEOMETRIC CONSTRUCTIONS

ACTIVITY 7.8

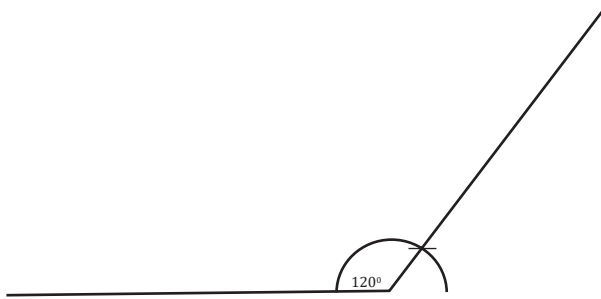
a)



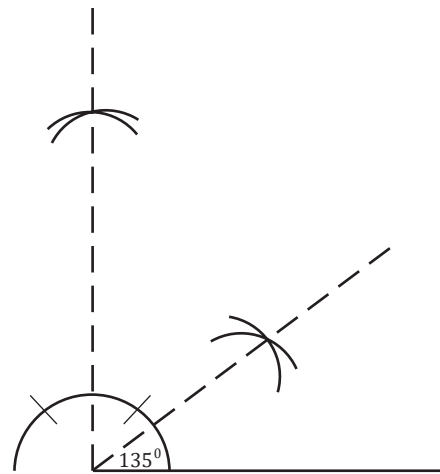
b)



c)

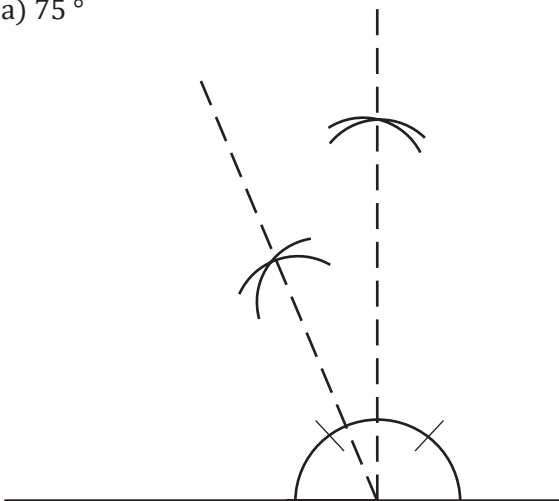


d)

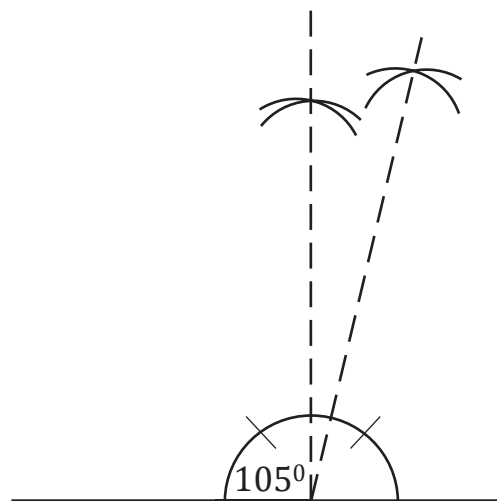


ACTIVITY 7.9

a) 75°

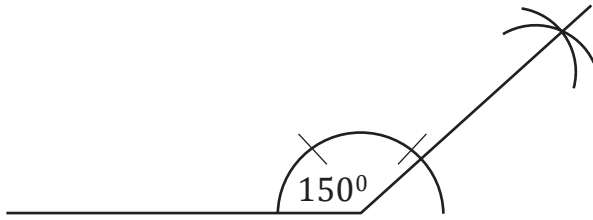


b)

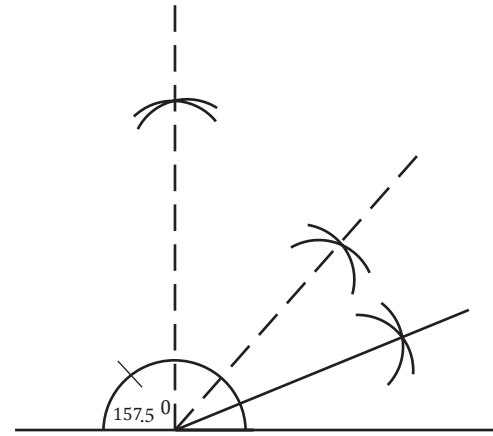


GEOMETRIC CONSTRUCTIONS

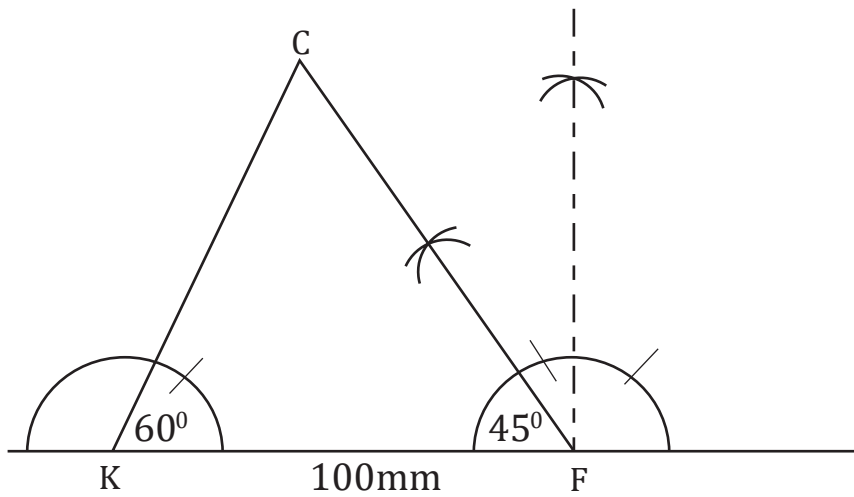
c)



d)



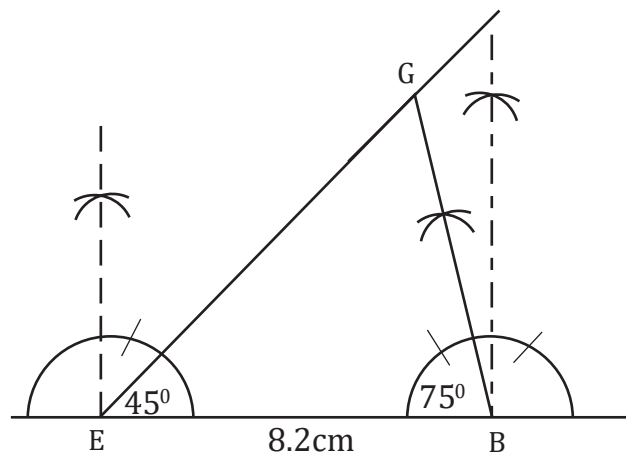
ACTIVITY 7.10



KC = 73 mm

FC = 91 mm

ACTIVITY 7.11

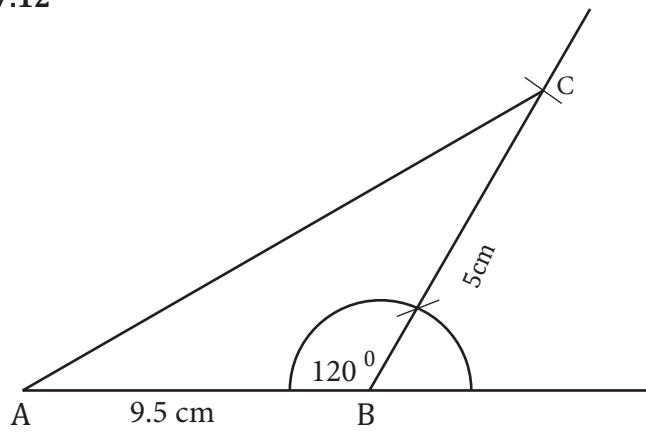


CG = 8.9 cm

BG = 6.7 cm

GEOMETRIC CONSTRUCTIONS

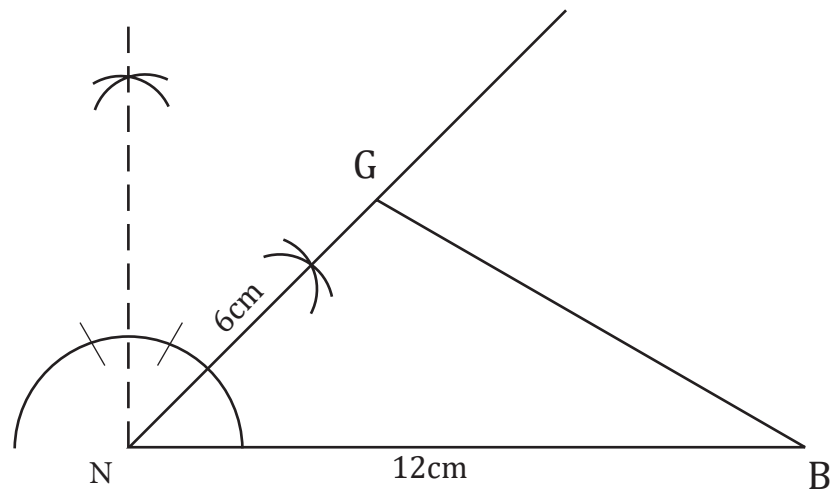
ACTIVITY 7.12



$AC = 12.8 \text{ cm}$

$\angle CAB = 20^\circ$

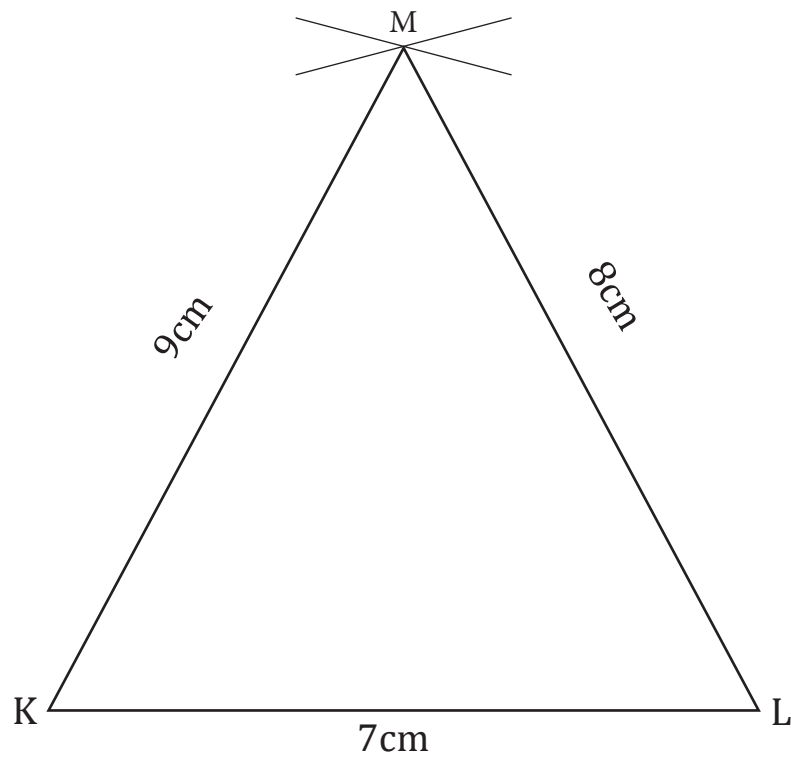
ACTIVITY 7.13



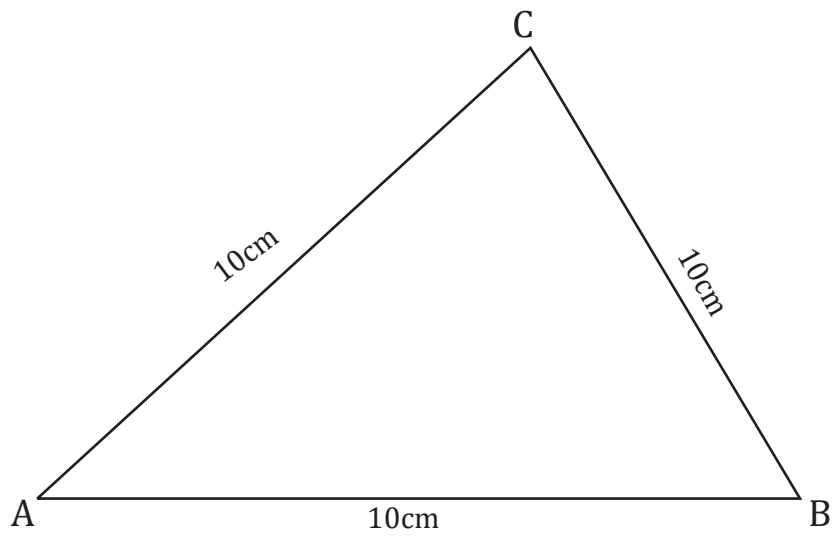
$GB = 9.0 \text{ cm}$

GEOMETRIC CONSTRUCTIONS

ACTIVITY 7.14

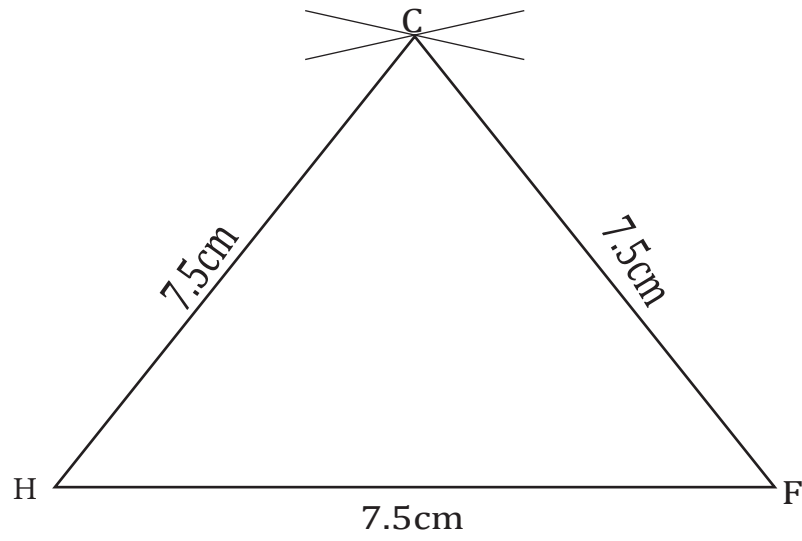


ACTIVITY 7.15



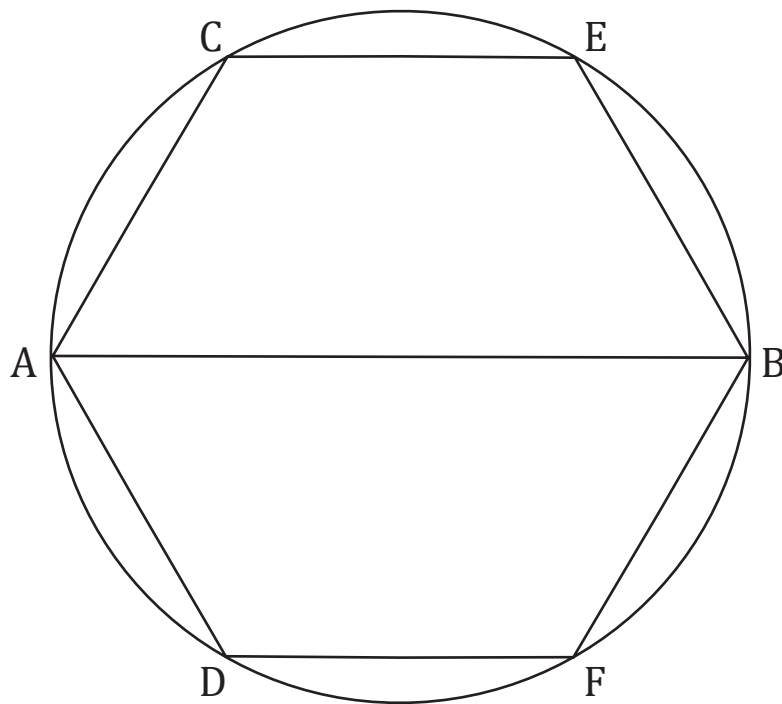
- i) $\angle ABC = 72^\circ$
 $\angle CAB = 34^\circ$
- iii) Isosceles triangle since

ACTIVITY 7.16



Equilateral triangle

ACTIVITY 7.17



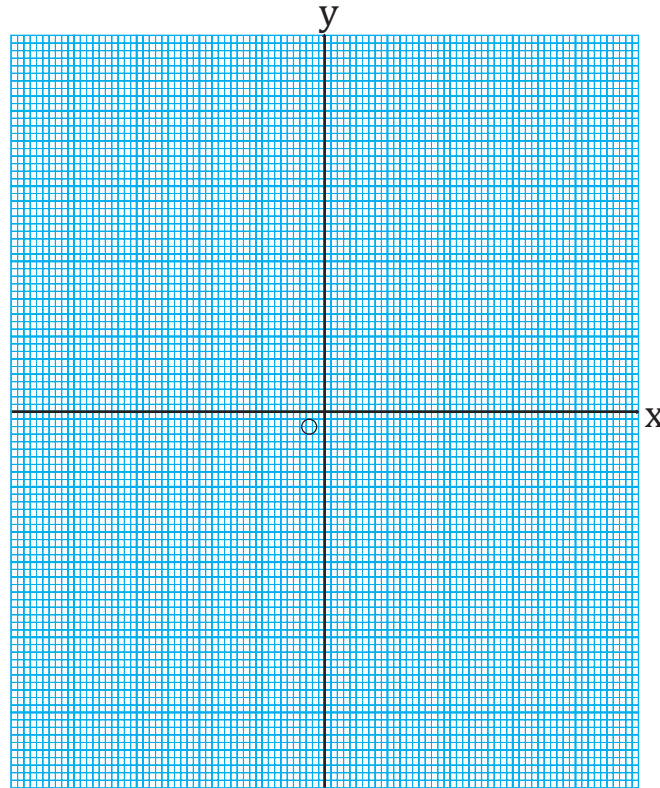
ACTIVITY 7.19

UNIT 8

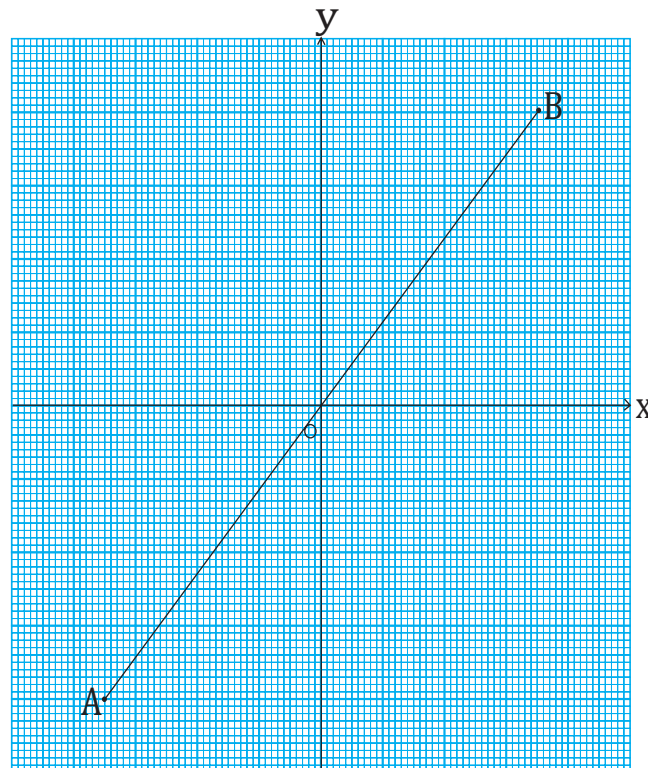
NUMBER PLANE

ACTIVITY 8.1

a)

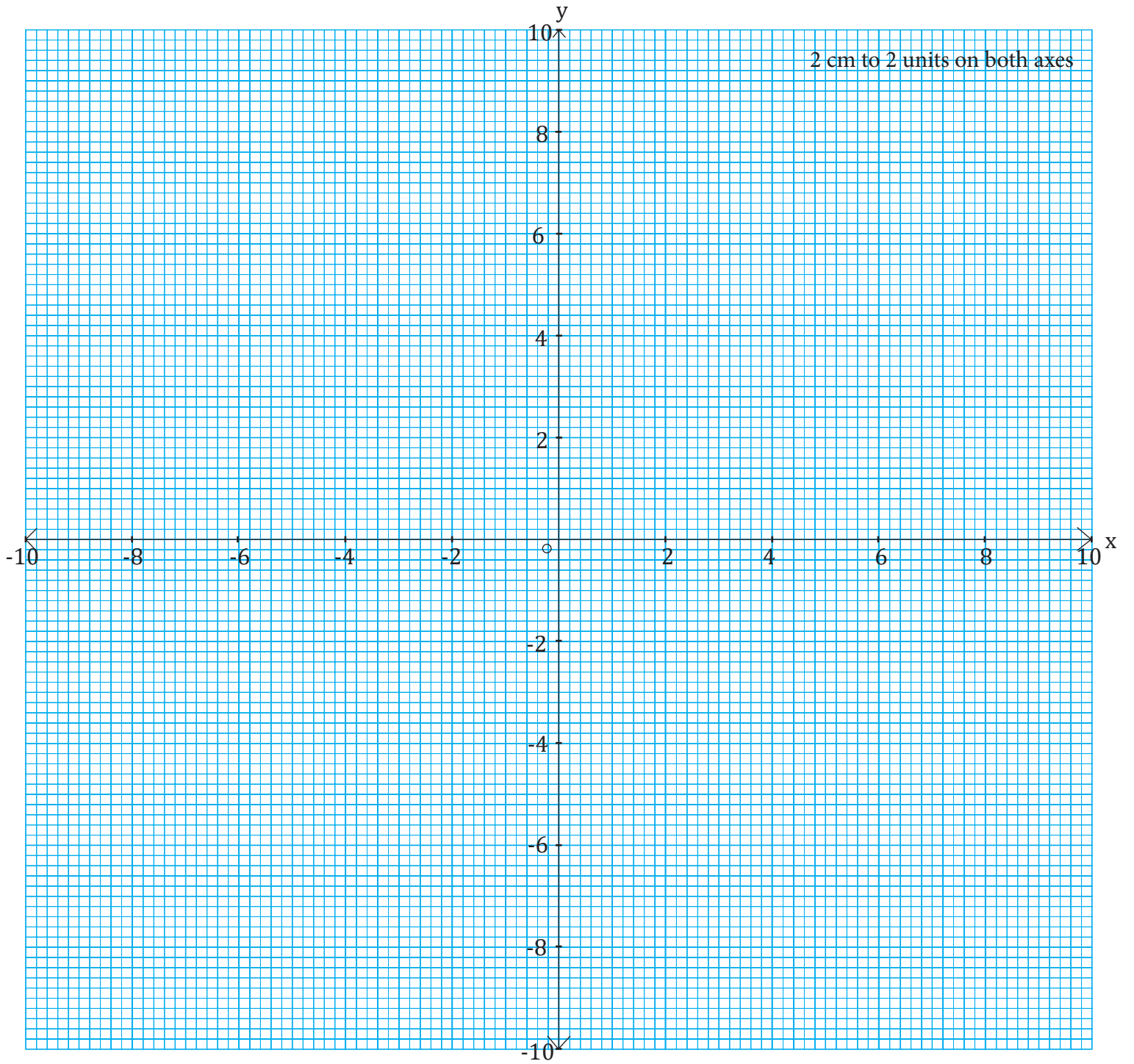


b)



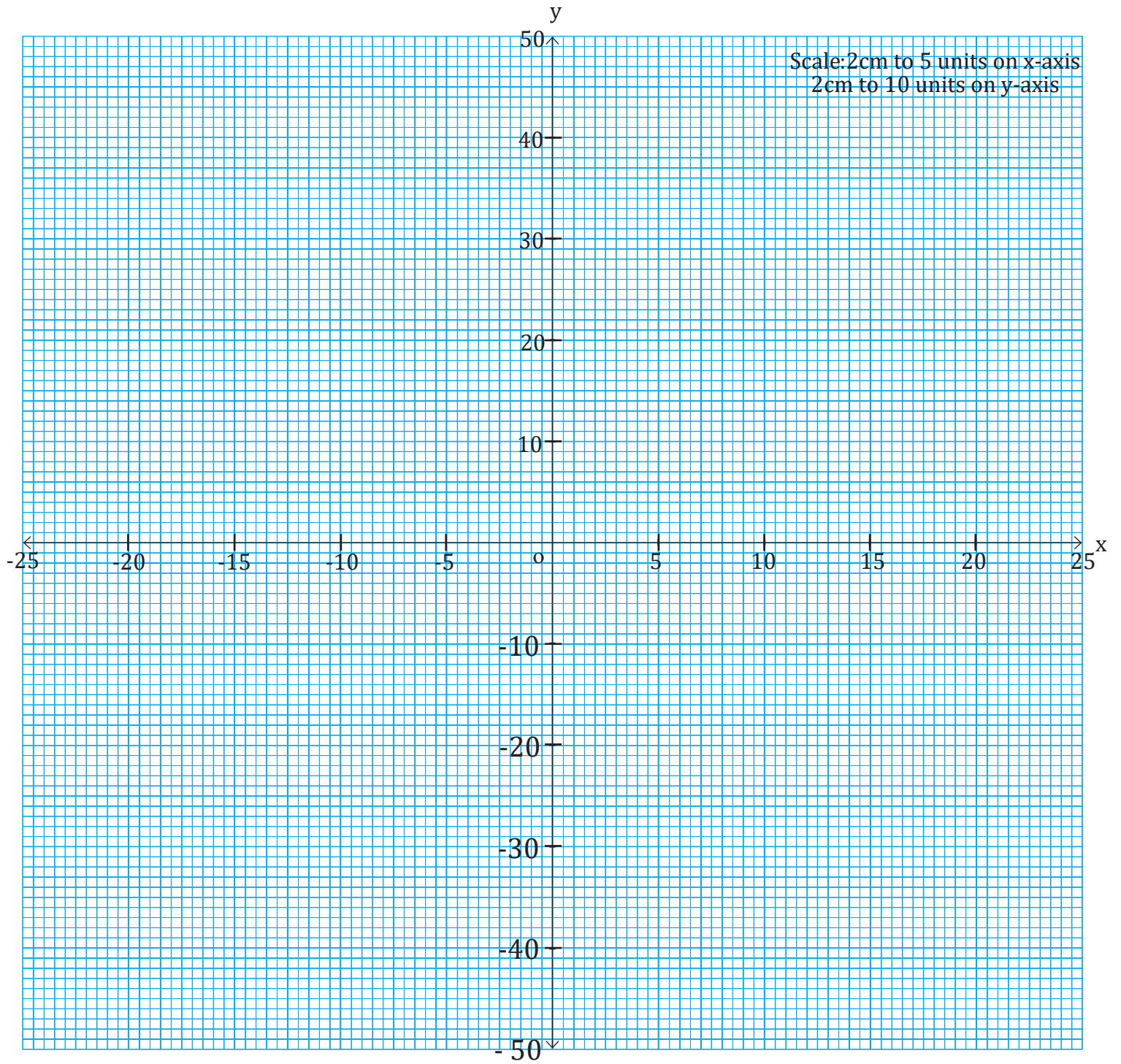
NUMBER PLANE

ACTIVITY 8.2



NUMBER PLANE

ACTIVITY 8.3



NUMBER PLANE

ACTIVITY 8.4

A (1, 1)

B (-2, -3)

C (-1, -5)

D (-2, 2)

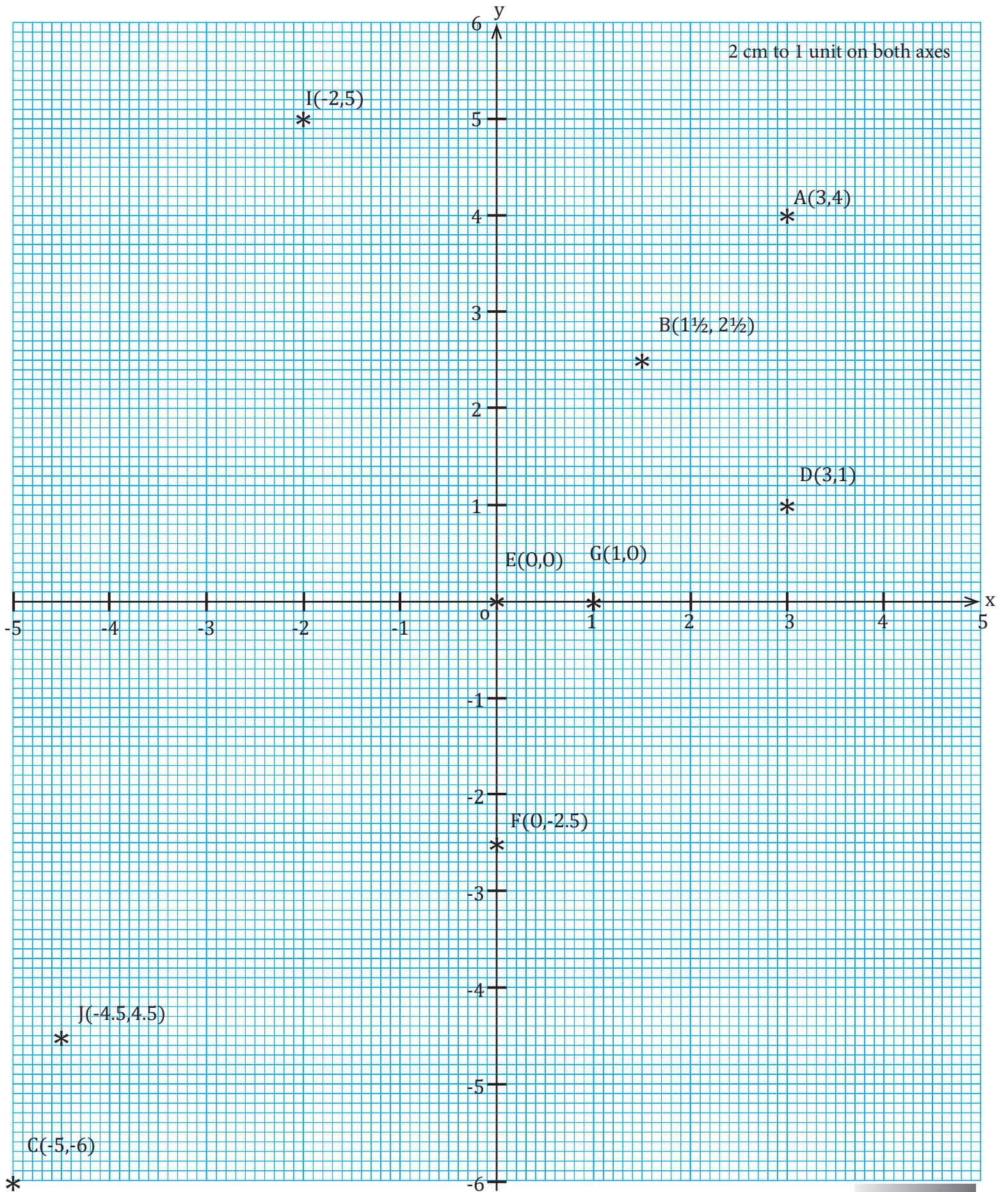
E (5, -6)

F (4, 0)

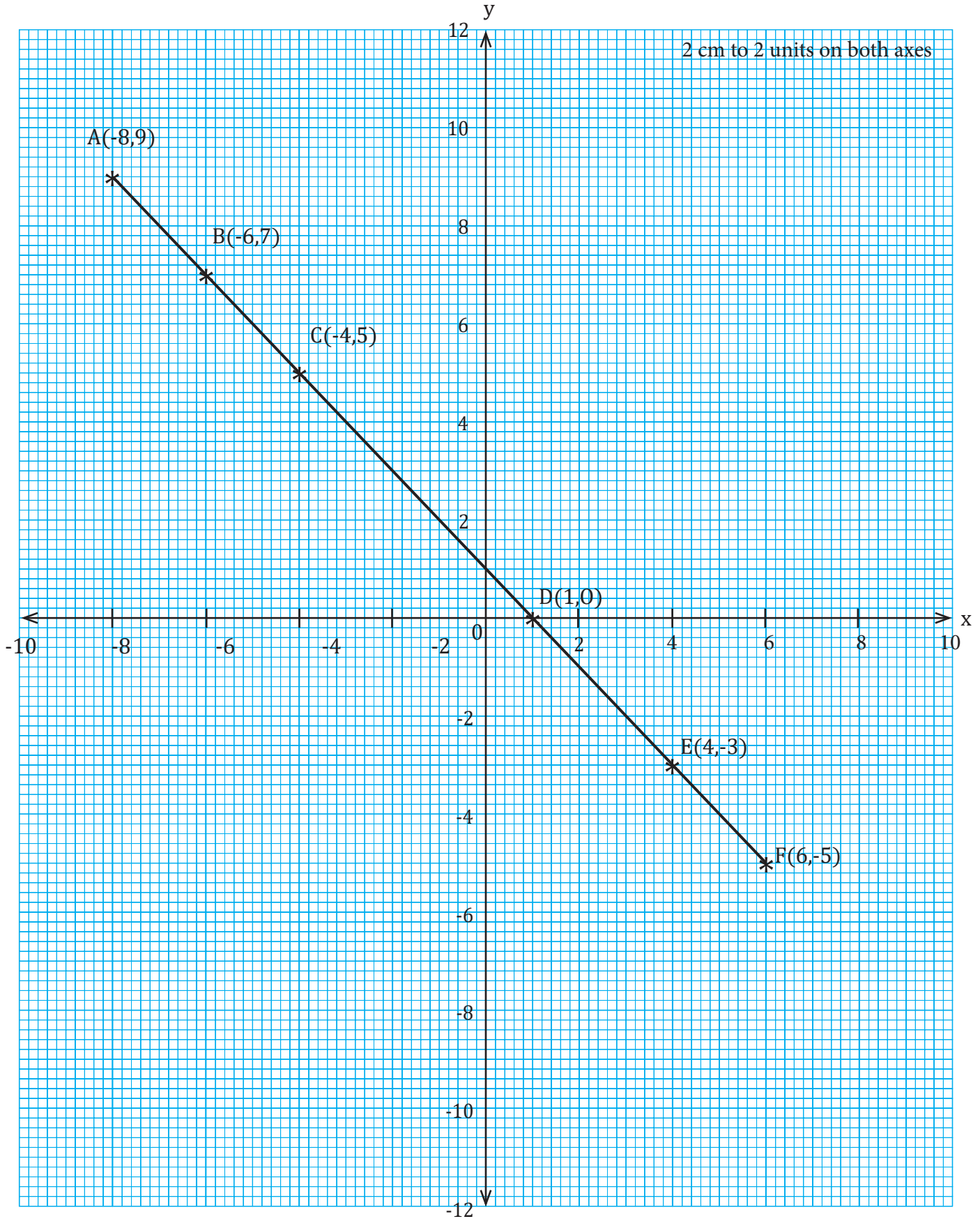
J (0, 5)

NUMBER PLANE

ACTIVITY 8.5



ACTIVITY 8.6



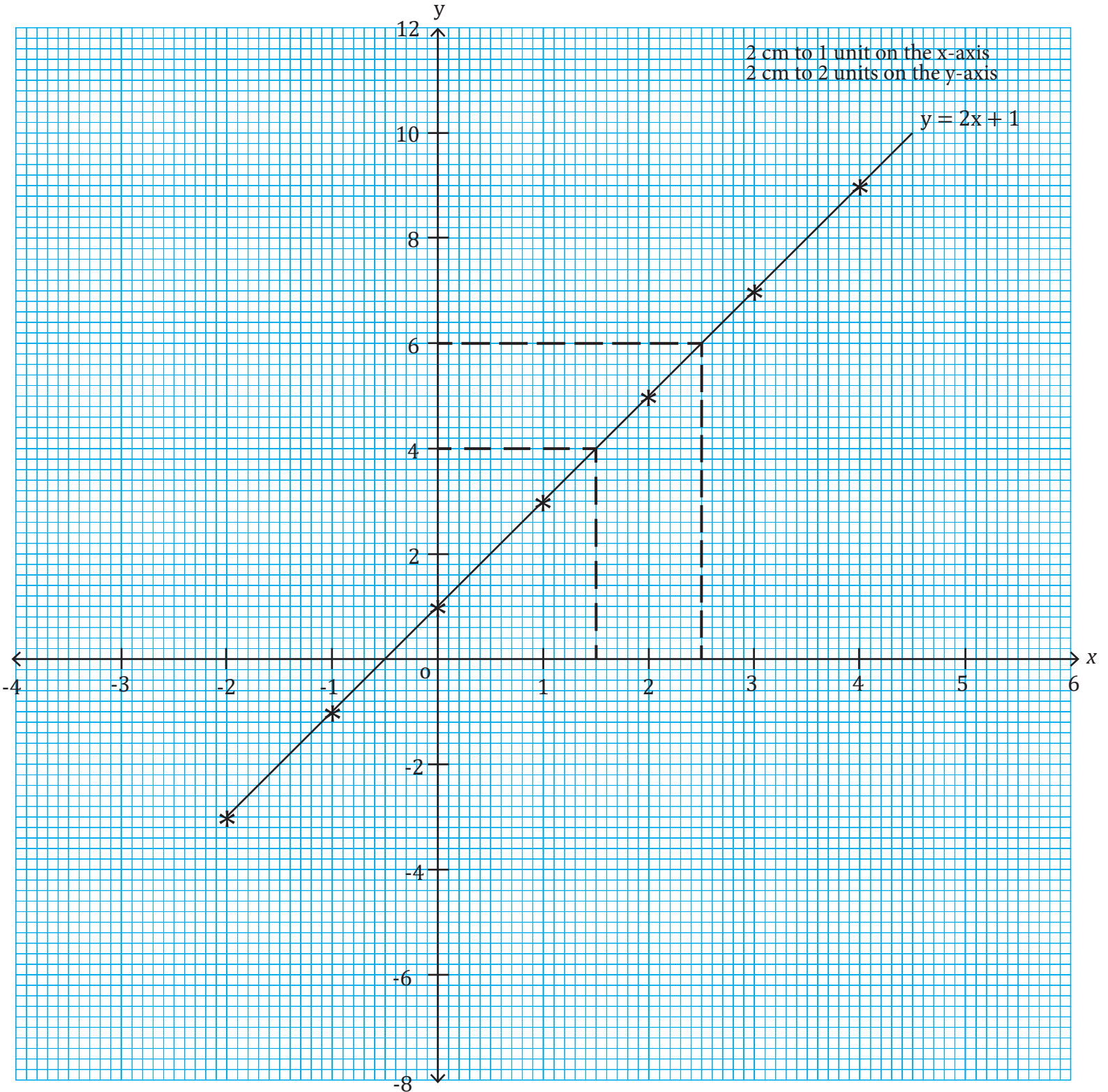
d) Angle $ADX = 135^\circ$

ACTIVITY 8.7

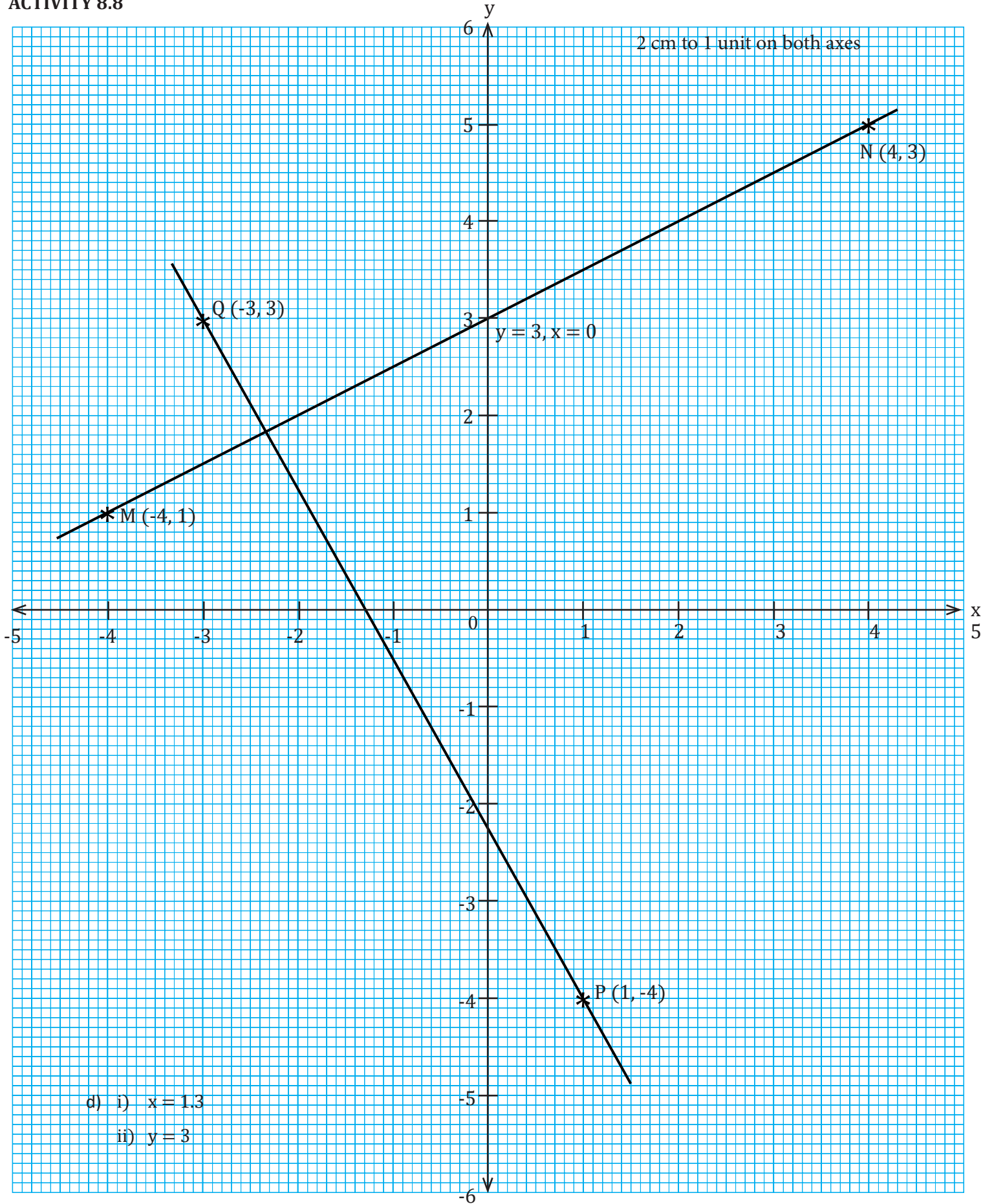
x	-2	-1	0	1	2	3	4
y	-3	-1	1	3	5	7	9

$x = 1.5$

$y = 6$



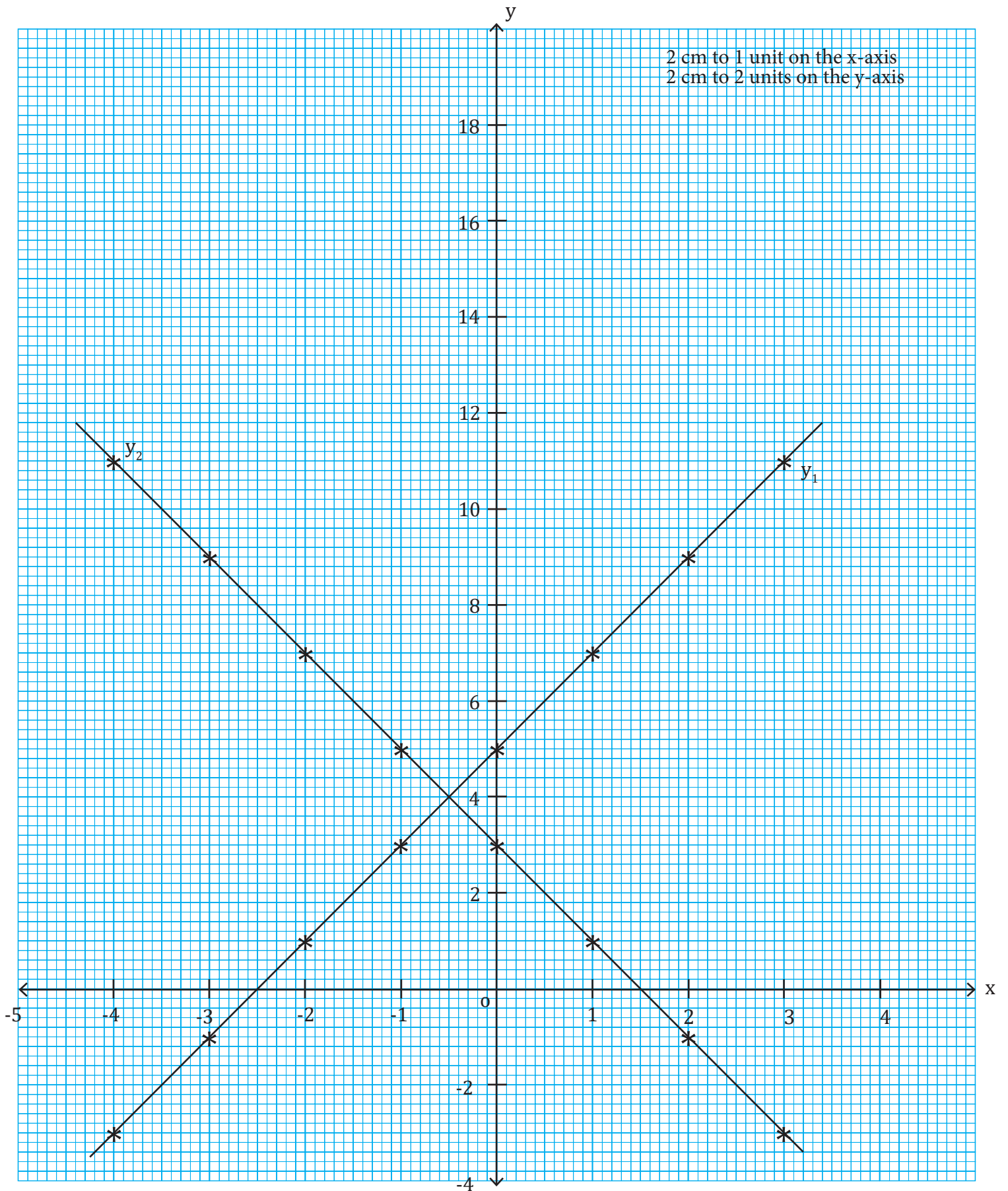
ACTIVITY 8.8



d) i) $x = 1.3$

ii) $y = 3$

ACTIVITY 8.9



ACTIVITY 8.9

a)

x	-4	-3	-2	-1	0	1	2	3
$y_1 = 2x + 5$	-3	-1	1	3	5	7	9	11
$y_2 = 3 - 2x$	11	9	7	5	3	1	-1	-3

c) y_1 and y_2 meets at point $(-\frac{1}{2}, 4)$

ACTIVITY 8.10

a) $-\frac{3}{4}$

b) 10

c) 3

d) $\frac{7}{2}$

ACTIVITY 8.11

a) $(0, -\frac{1}{5})$

b) $(0, \frac{5}{3})$

c) $(0, \frac{7}{3})$

d) $(0, -2)$

ACTIVITY 8.12

a)

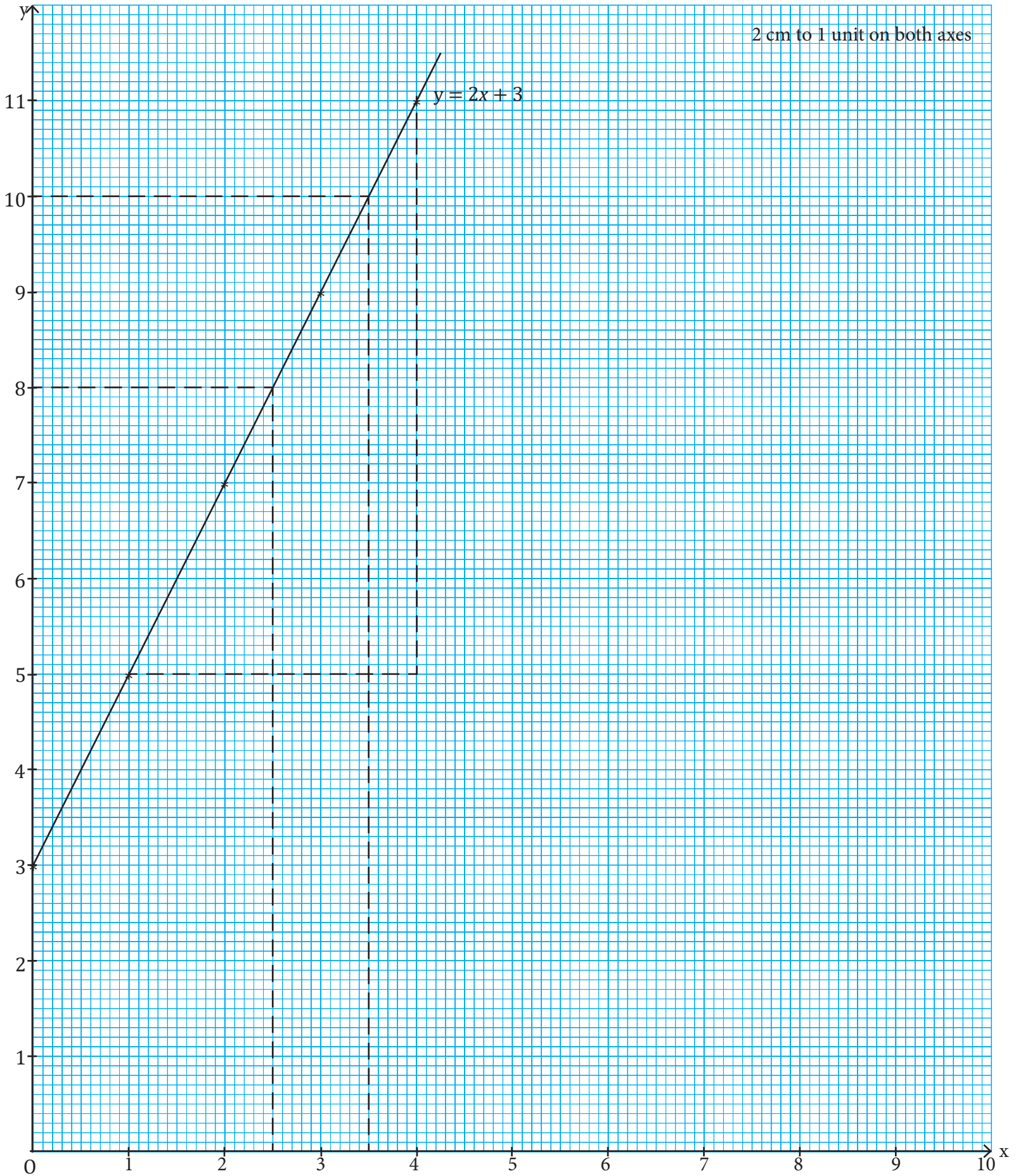
x	0	1	2	3	4
↓	↓	↓	↓	↓	↓
y	3	5	7	9	11

b) i) $y = 10$

ii) $x = 2.5$

iii) 2

NUMBER PLANE



ACTIVITY 8.13

1) a) $y = 7 - 2x$ or $y + 2x - 7 = 0$

b) $y = 3x + 1$ or $y - 3x - 1 = 0$

c) $y = 1 - x$ or $y + x - 1 = 0$

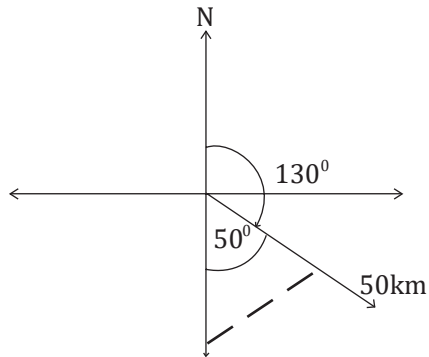
2) $y = 1 - x$ or $y + x - 1 = 0$

UNIT 9

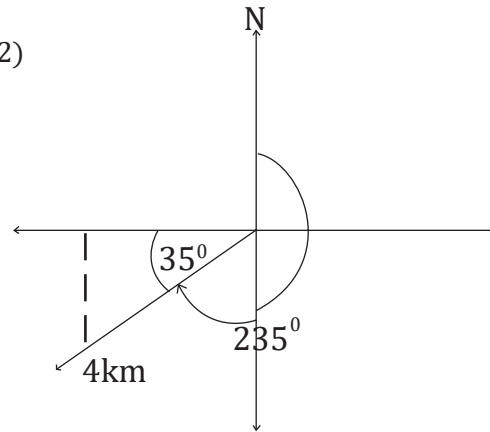
VECTORS

ACTIVITY 9.1

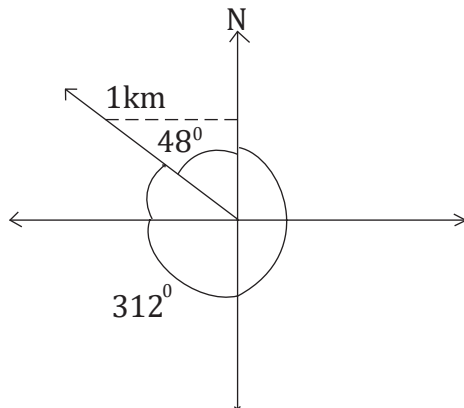
1)



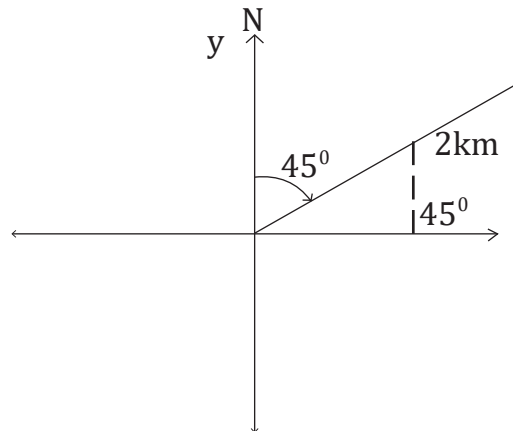
2)



3)



4)



ACTIVITY 9.2

a) 105°

b) 298°

c) 070°

d) 253°

ACTIVITY 9.3

A = 070° North East

B = 060° South East

C = 080° South West

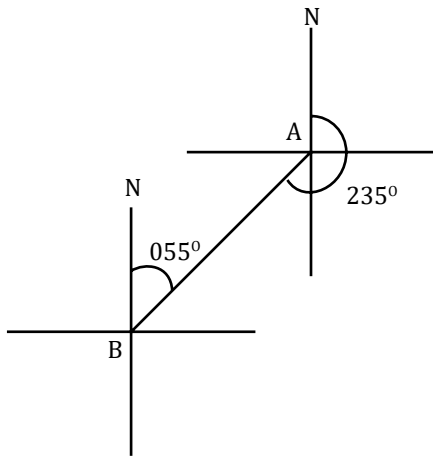
D = 060° West

E = 050° North West

VECTORS

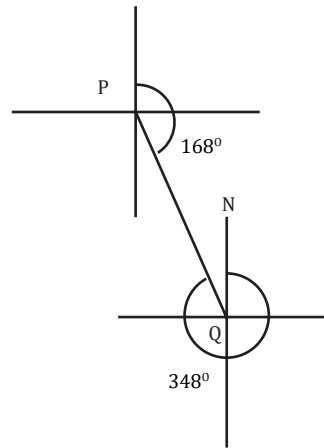
ACTIVITY 9.4

a)



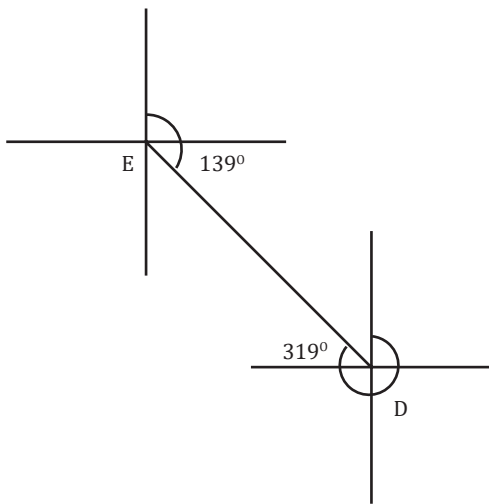
Bearing of B from A = 235°

b)



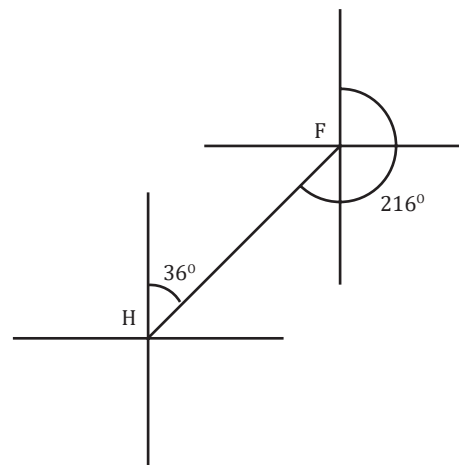
Bearing of P from Q = 348°

c)



Bearing of D from E = 139°

d)



Bearing of F from H = 36°

ACTIVITY 9.5

a) 359°

b) 196°

c) 170°

d) 283°

ACTIVITY 9.6

a) $\sqrt{5}$ units

b) 13 units

c) 10 units

d) 5 units

VECTORS

ACTIVITY 9.7

- a) 5 units
b) 10 units
c) 21.2 units
d) 44.7 units

ACTIVITY 9.8

- $\vec{OA} = \begin{pmatrix} 1.5 \\ 3 \end{pmatrix}$
- $\vec{OC} = \begin{pmatrix} -1 \\ -1.5 \end{pmatrix}$
- $\vec{OE} = \begin{pmatrix} -1 \\ 3 \end{pmatrix}$
- $\vec{OB} = \begin{pmatrix} 3 \\ -3 \end{pmatrix}$
- $\vec{OD} = \begin{pmatrix} -4 \\ 1 \end{pmatrix}$

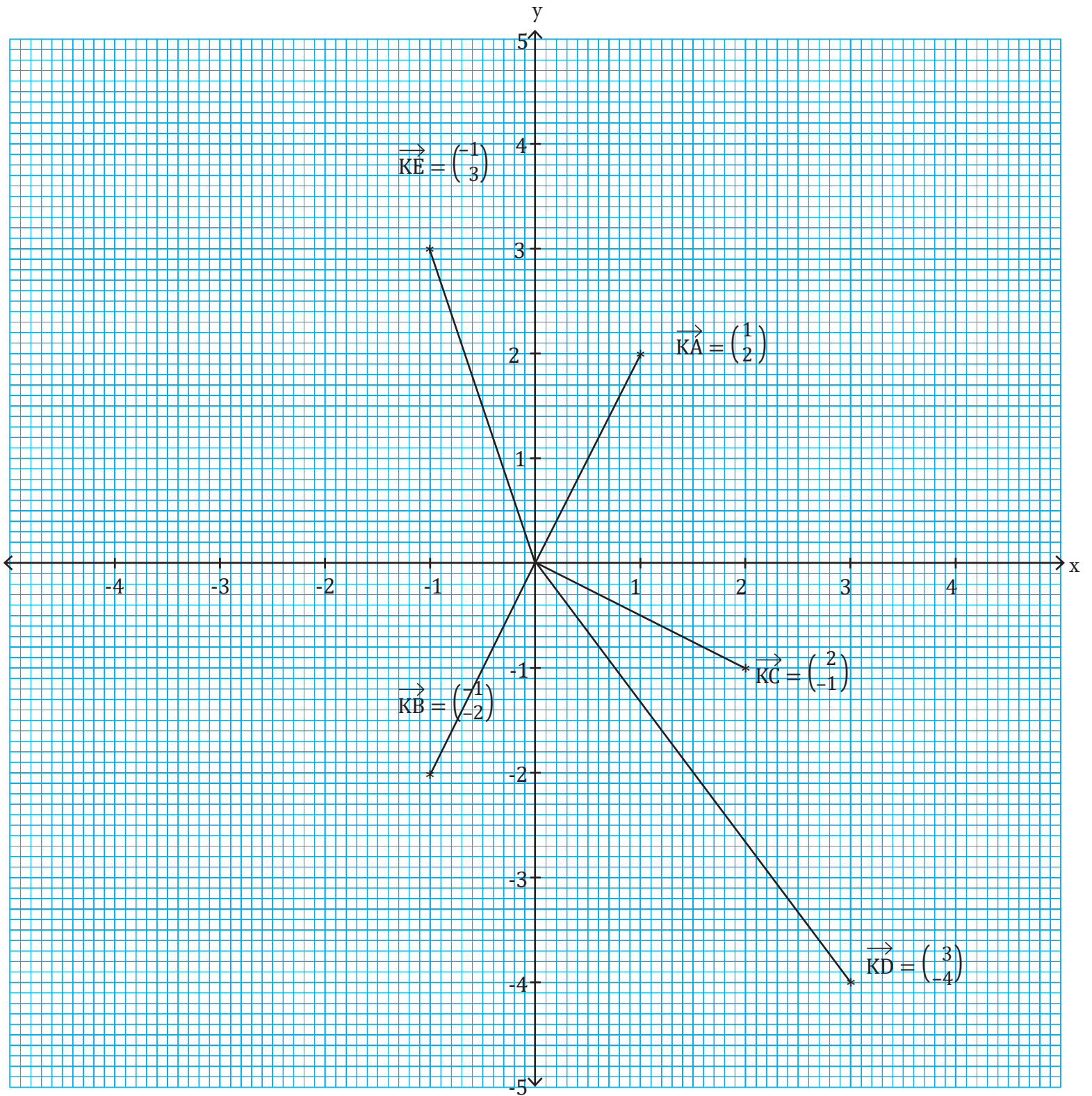
ACTIVITY 9.9

P.T.O.

ACTIVITY 9.10

- a) $\vec{QP} = \begin{pmatrix} -7 \\ -4 \end{pmatrix}$
b) $\vec{XY} = \begin{pmatrix} 2 \\ 0 \end{pmatrix}$
c) $\vec{BA} = \begin{pmatrix} 3 \\ 4 \end{pmatrix}$
d) $\vec{NM} = \begin{pmatrix} \frac{1}{2} \\ -0.5 \end{pmatrix}$
e) $\vec{CD} = \begin{pmatrix} -7 \\ -4 \end{pmatrix}$

VECTORS



VECTORS

ACTIVITY 9.11

1) $p = 1; q = 2$

2) $x = 1; y = 2$

ACTIVITY 9.12

a) $\begin{pmatrix} 2 \\ 7 \end{pmatrix}$

b) $\begin{pmatrix} 8 \\ 1 \end{pmatrix}$

c) $\begin{pmatrix} 2 \\ 2 \end{pmatrix}$

d) $\begin{pmatrix} 12 \\ 1 \end{pmatrix}$

ACTIVITY 9.13

1) $\begin{pmatrix} 15 \\ 11 \end{pmatrix}$

2) $\begin{pmatrix} -18 \\ -12 \end{pmatrix}$

3) $\begin{pmatrix} 3 \\ 3 \end{pmatrix}$

4) $\begin{pmatrix} 12 \\ 10 \end{pmatrix}$

ACTIVITY 9.14

1) $\begin{pmatrix} 6 \\ 12 \end{pmatrix}$

2) $\begin{pmatrix} -5 \\ 0 \end{pmatrix}$

3) $\begin{pmatrix} 2 \\ 4 \end{pmatrix}$

4) $\begin{pmatrix} 19 \\ -2 \end{pmatrix}$

ACTIVITY 9.15

1) $\begin{pmatrix} 5 \\ 11 \end{pmatrix}$

2) $\begin{pmatrix} -3 \\ 1 \end{pmatrix}$

3) $\begin{pmatrix} -2 \\ 10 \end{pmatrix}$

4) $\begin{pmatrix} -8 \\ -1 \end{pmatrix}$

UNIT 10

PROPERTIES OF QUADRILATERALS

ACTIVITY 10.1

- 1) a) Square b) Kite
 c) Parallelogram d) Rectangle
 e) Rhombus f) Trapezium

2)

Property	Quadrilateral
Having no acute angles	square, rectangle
Having reflex angles	None
Pair(s) of parallel lines	Square, parallelogram, rectangle, rhombus, trapezium
Diagonals bisecting at 90°	Square, kite, parallelogram, rectangle, rhombus
Being symmetrical	Square, kite, parallelogram, rectangle, rhombus

ACTIVITY 10.2

1)

Type of Quadrilateral	Property					
	Diagonals	Congruent Sides	Congruent Angles	Parallel Sides	Right Angles	Symmetries
Kite	Yes	Yes	Yes	No	No	Yes
Rhombus	Yes	Yes	Yes	Yes	Yes	Yes
Trapezium	No	No	No	Yes	No	No
Parallelogram	Yes	Yes	Yes	Yes	Yes	No

- 2) A square has right angles while a rhombus has no right angles.

UNIT 11

RATIO AND PROPORTION

ACTIVITY 11.1

- a) 1 km : 10 km
- b) 3 °C : 7 °C
- c) 7 kg : 8 kg
- e) 1 mm : 10 mm

ACTIVITY 11.2

- a) 3 : 4
- b) 7 : 2
- c) 5 : 9
- d) 3 : 2

ACTIVITY 11.3

- a) GH¢22.5
- b) 6.25 kg
- c) i) 2700 words
- ii) 340 minutes

ACTIVITY 11.4

- a) 45 fishermen
- b) 36 farm labourers
- c) i) 4 hours
- ii) 96 workers

ACTIVITY 11.5

- a) 5
- b) GH¢ 333.3
- c) 1 : 1
- d) 500 kg

ACTIVITY 11.6

- a) GH¢ 8,417.00
- b) 30 books
- c) 7200 oranges

ACTIVITY 11.7

- 1) a) GH¢ 4,000.00
- b) GH¢ 26,000.00
- c) GH¢ 44,000.00
- 2) 4.2 tonnes

ACTIVITY 11.8

- a) Naa = GH¢ 510.00; Dei = GH¢ 204.00; Korkoi = GH¢ 306.00
- b) 135 Cattle

RATIO AND PROPORTION

ACTIVITY 11.9

- a) 1 : 4
- b) 1 : 3
- c) 1 : 3
- d) 7 : 2

ACTIVITY 11.10

- 1) 1 : 0.5
- 2) a) 100,000
b) 0.125 m

ACTIVITY 11.11

- 1) a) $x : 5y$
- c) 24 days : 5 days
- b) 1 : 1
- e) 10 min : 3 min
- 2) GH¢ 580.00
- 3) a) 250 cm^2
- b) 140 animals
- 4) 800 cm
- 5) 30
- 6) GH¢ 384.00
- 7) 10000 mm or 10 m
- 8) 1 : 40

UNIT 12

RATES

ACTIVITY 12.1

- | | |
|-----------------|------------------|
| a) i) 250 words | b) i) GH¢ 8.00 |
| ii) 1000 words | ii) GH¢ 2,400.00 |
| | iii) 187.5 km |

ACTIVITY 12.2

- | | |
|-----------------|----------------|
| a) 4 hours | b) 12.5 km |
| c) 0.015 km/h | |
| d) i) GH¢ 1,722 | ii) GH¢ 227.55 |

ACTIVITY 12.3

- | | |
|---------------|-------------------------|
| 1) GH¢ 82.50 | 2) GH¢ 96.00 |
| 3) GH¢ 500.00 | 4) $1\frac{2}{3}$ years |

ACTIVITY 12.4

- | | |
|--|-------------------------|
| 1) Interest = GH¢
Total Amount = GH¢ 1,350.00 | 2) $2\frac{2}{9}$ years |
| 3) 15% | |

ACTIVITY 12.5

- | |
|--------------------|
| 1) a) GH¢ 5,208.00 |
| b) 7% |
| 2) a) GH¢ 3,684.20 |
| b) GH¢ 3,868.41 |

ACTIVITY 12.6

- | | |
|--------|-----------------|
| a) 17% | b) GH¢ 3,111.11 |
|--------|-----------------|

ACTIVITY 12.7

- | | |
|-----------------|-----------------|
| a) 2.4% | b) GH¢ 2,172.00 |
| c) GH¢ 3,636.36 | |

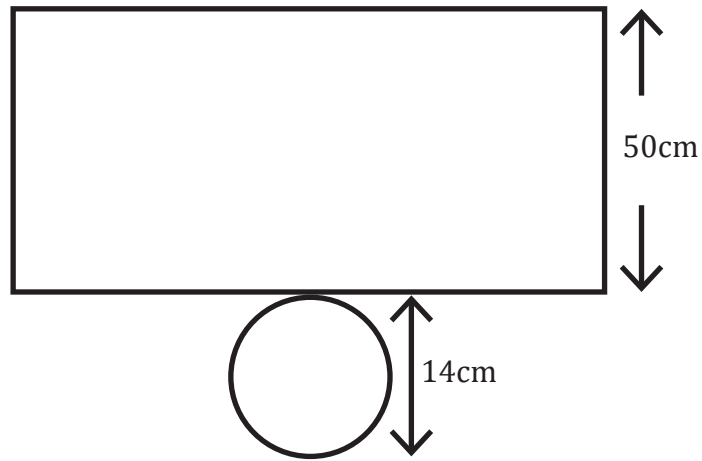
RATES

ACTIVITY 12.8

- a) 50 km/h
- b) 1890 km
- c) i) 2 l
- d) i) GH¢ 4,800.00
- ii) 2.5 hours
- ii) GH¢ 16,800.00
- e) i) GH¢ 1,800.00
- ii) 15%
- f) GH¢ 4,074

ACTIVITY 13.9

a)



b) 50 cm

c) $C = 44$ cm; $l = 44$ cm

d) 2354 cm²

e) 7700 cm³

UNIT 14

PROBABILITY

ACTIVITY 14.1

- a) 6
c) HH; HT; TH; TT
b)

b) 2

AB	1	2	3	4	5	6
1	(1, 1)	(1, 2)	(1, 3)	(1, 4)	(1, 5)	(1, 6)
2	(2, 1)	(2, 2)	(2, 3)	(2, 4)	(2, 5)	(2, 6)
3	(3, 1)	(3, 2)	(3, 3)	(3, 4)	(3, 5)	(3, 6)
4	(4, 1)	(4, 2)	(4, 3)	(4, 4)	(4, 5)	(4, 6)
5	(5, 1)	(5, 2)	(5, 3)	(5, 4)	(5, 5)	(5, 6)
6	(6, 1)	(6, 1)	(6, 3)	(6, 4)	(6, 5)	(6, 6)

ACTIVITY 14.2

- 1) a) $\frac{1}{2}$
b) $\frac{1}{2}$

- 2) b) $\frac{1}{2}$
c) $\frac{1}{6}$
d) $\frac{1}{3}$

ACTIVITY 14.3

- 1) a) $\frac{4}{15}$
b) $\frac{2}{15}$
c) $\frac{12}{15}$
2) $\frac{3}{10}$

ACTIVITY 14.4

- 1) a) $\frac{1}{2}$
b) $\frac{1}{3}$
2) $\frac{1}{3}$