

**SECTION A**

1. C
2. C
3. B
4. C
5. A
6. C
7. B
8. A
9. D
10. C
11. A
12. A
13. B
14. A
15. C
16. A
17. C
18. A
19. B
20. D

**SECTION B**

21. a) 5 buses  
b) Ksh 60,000  
c) Ksh 12,000  
d) Ksh 72,000  
e) Ksh 82,500  
f) Profit of Ksh 10,500
22. a) 4000 m<sup>2</sup>  
  
b) 260 m  
  
c) Ksh 39,000  
  
d) 3000 m<sup>2</sup>  
  
e) 1000 m<sup>2</sup>  
  
f) 15,000 kg

23. a) Ksh 5,000

b) Ksh 8,000

c) Ksh 3,000

d) Ksh 36

e) Ksh 540

f) 20%

24.

$$\begin{pmatrix} 7 & 4 \\ 4 & 4 \end{pmatrix}$$

25. 21

26. 166.67 USD

27. 3000 liters

28. 747.80 cm<sup>2</sup>

29. 3 g/cm<sup>3</sup>

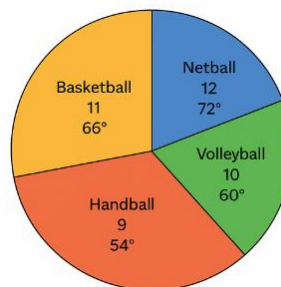
30. 7.07

31. 3

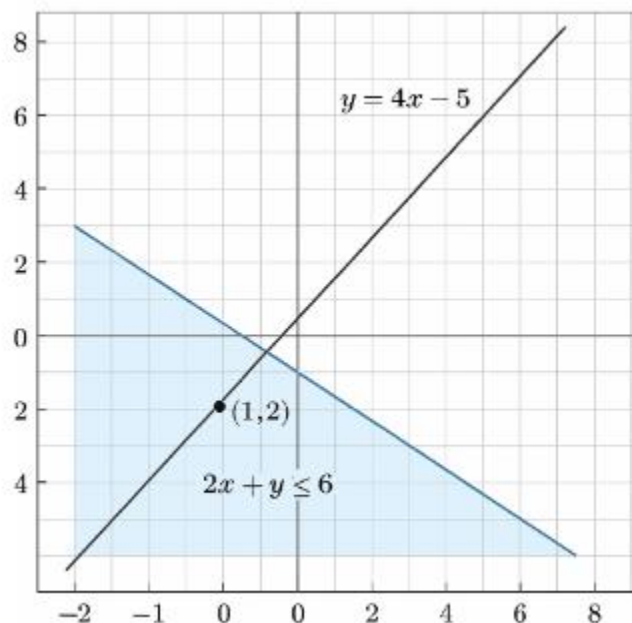
32.  $x = 3.6$ ,  $y = 0.6$

33. (Pie chart description with angles)

- ✓ Football: 108°
- ✓ Netball: 72°
- ✓ Volleyball: 60°
- ✓ Handball: 54°
- ✓ Basketball: 66°

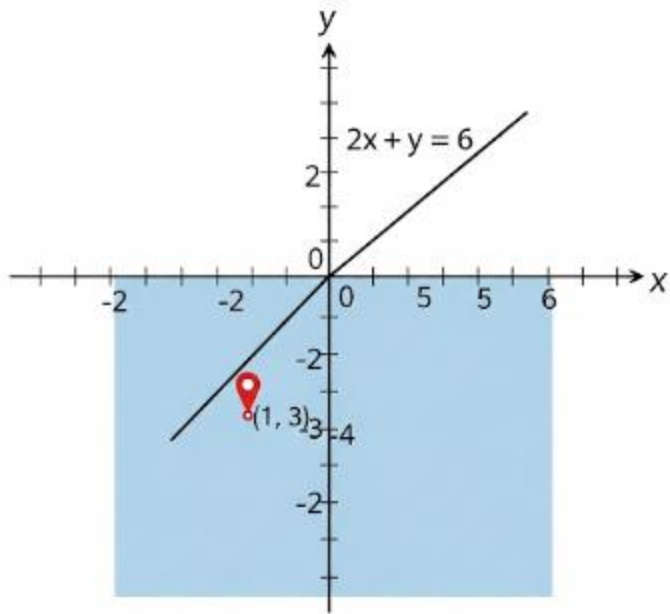


34.  $y = 4x - 5$  (Drawing required on graph)

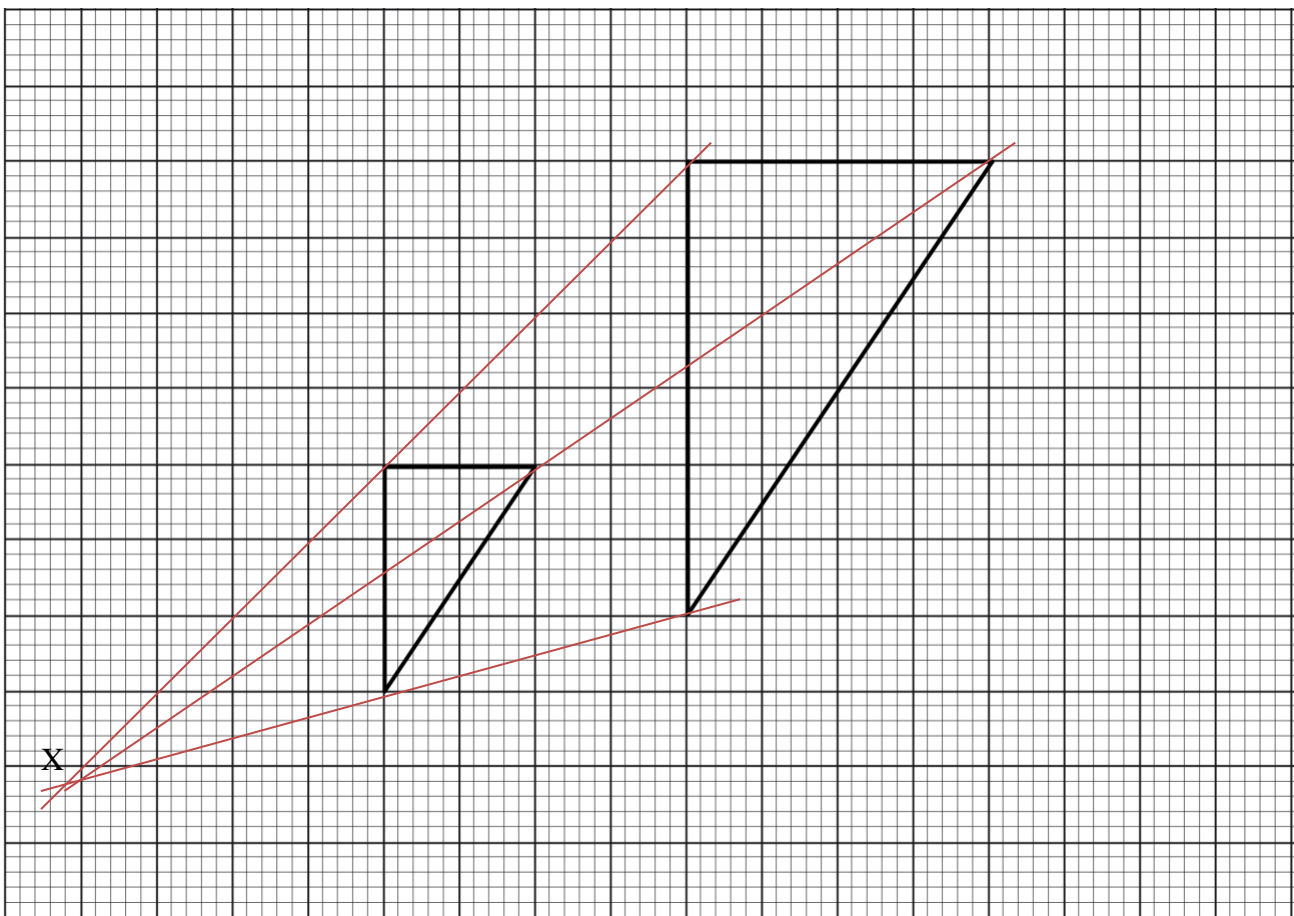


35. (Inequality  $2x + y \leq 6$  represented on graph, shaded region below or including the line)

1. One suitable value:  $(0, 0)$



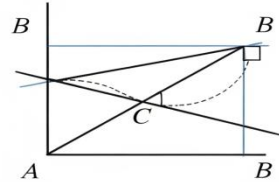
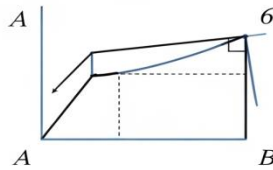
36. a) Scale factor 2



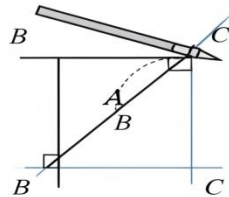
b) (Point X marked on grid, intersection of lines connecting corresponding vertices)

37. a) (Construction of triangle ABC with  $AB=6\text{cm}$ ,  $BC=8\text{cm}$ ,  $AC=10\text{cm}$  using ruler and compass) b) (Measured angle ABC from the constructed triangle)

Construction of ABC with  $BC = 8\text{ cm}$ ,  $AC = 10\text{ cm}$   
only a ruler and compass



1. Draw a line segment AB of 6 cm length 6 cm
2. With A as the center and a radius of 10 cm, draw an arc
3. With B as the center and a radius 8 cm, draw another arc
4. The point of intersection of these two arcs is C. Join AC and BC to complete the triangle



38. a) (Cartesian plane from -5 to 5 drawn)

b)  $P(1, 3)$  and  $Q(-2, -3)$  plotted

c) Line passing through P and Q drawn; Equation:  $y = 2x + 1$

