

SECTION A (40marks)

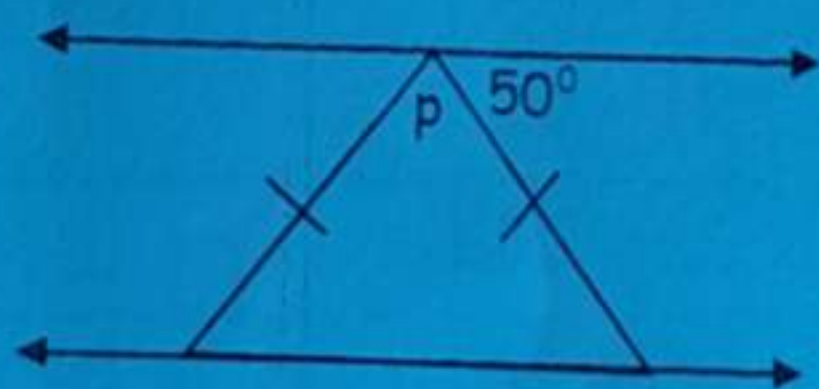
1. Workout: $87 - 65$

2. Write 55001 in words

3. Simplify: $-6 - -4$

4. Solve for x : $\frac{3}{5}x + 6 = 2 + x$

5. In the diagram below, find the value of angle p in degrees.



6. Given that set $Q = \{\text{all prime numbers less than } 10\}$, find $n(Q)$

7. Workout $\frac{3}{4} \div 1\frac{1}{2}$

8. Find the value of $2^4 + 3^0$

9. Change 9:40am in to 24 hour clock

10. Using a sharp pencil, a ruler and a pair of compasses only, construct an angle of 135°

11. Write 0.08 as a common simplified fraction

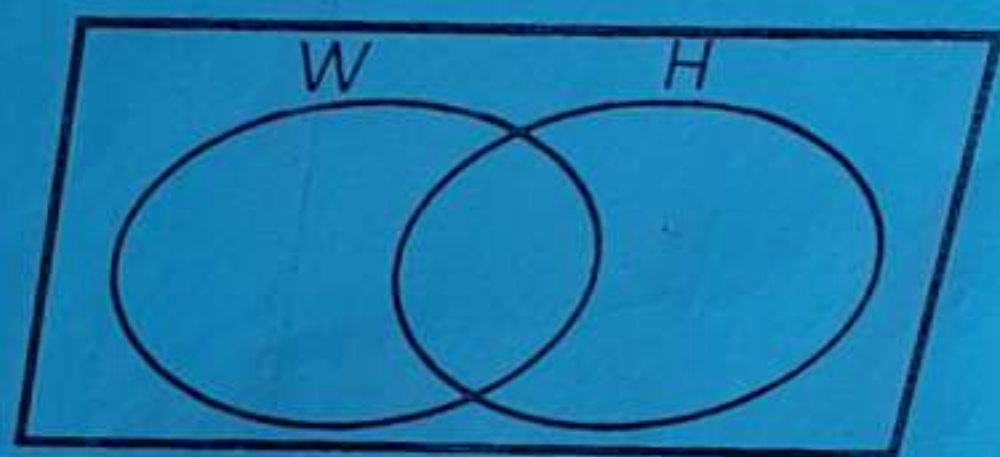
12. Find the Highest Common Factor (GCF) of 18 and 24.

13. Round off 89.678 to the nearest whole number

14. Workout: $(2.3 \times 40) + (2.3 \times 60)$ using distributive property

15. In a basket, there are 12 apples and 13 mangoes. What is the probability of picking an apple from the basket at random?

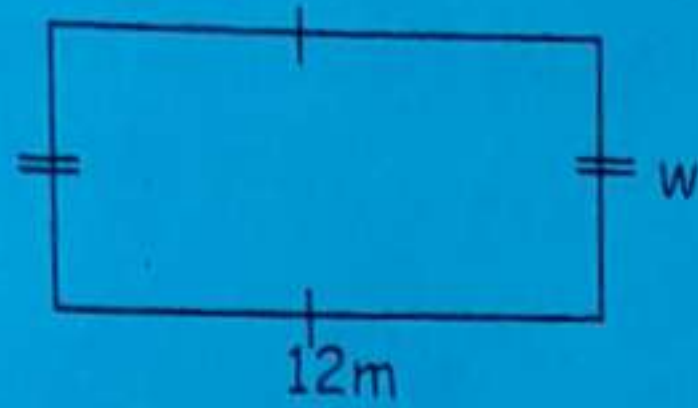
16. In the venn diagram below, shade neither set W nor set H



17. Write 0.00783 in scientific notation.

18. Twelve men can do a piece of work in 15 days. How many men can do the same work in 10 days?

19. The perimeter of the rectangle below is 36m. Find its width if the length is 12m

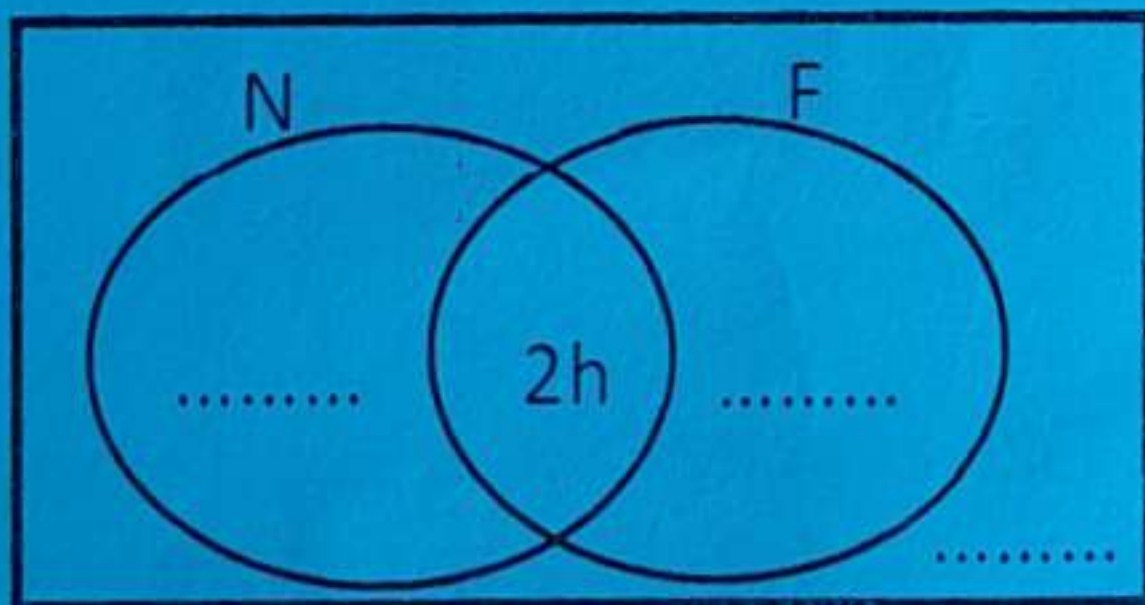


20. A bus covered a distance of 210km in 3 hours and 30 minutes. What was its average speed?

SECTION B (60marks)

21. In a class of 60 pupils, 30 play netball (N), 35 pupils play football (F), 2h pupils play both games while 5 pupils play none of the two games.

a) Complete the venn diagram below using the above information. (3marks)



b) How many pupils play both games? (2marks)

22.a) Change 13_{ten} to base two

b) Find the number which has been expanded below

(3m)

$$(5 \times 10^3) + (6 \times 10^1) + (7 \times 10^0) + (9 \times 10^{-2})$$

23.a) Solve $14p + 4 = 11$

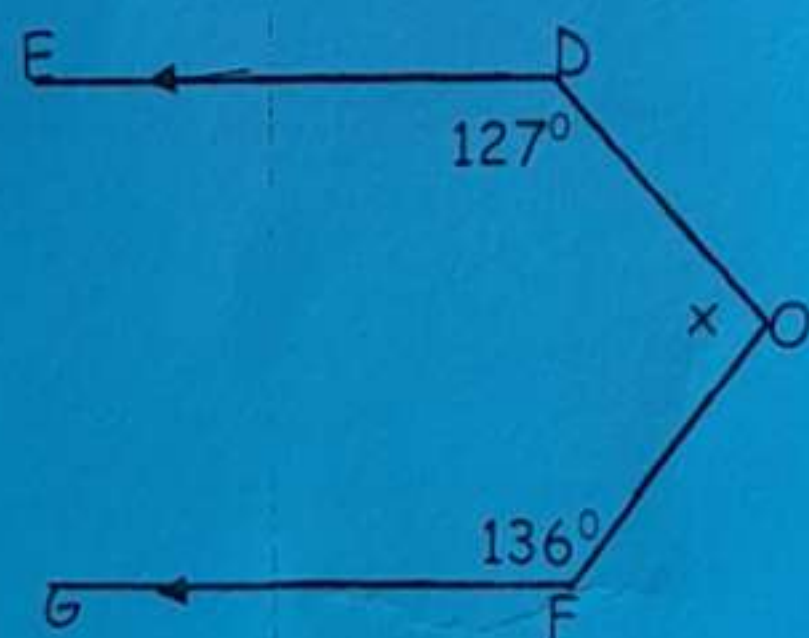
(2marks)

b) Solve the inequality: $3x + 4 > x + 8$
(3marks)

24. A fuel tank of a lorry was $\frac{2}{3}$ full of petrol. When $\frac{1}{4}$ of the petrol in the tank was used, the remaining petrol could run the lorry 120km. What distance can the lorry cover when the fuel tank is completely full? (4marks)

25.a) The interior angle of a regular polygon is 36 more than its exterior angle. How many sides has the polygon? (3marks)

b) In the figure below, DE is parallel to FG, angle ODE = 127° and angle OFG = 136° . Calculate the size of angle x (2marks)



26a) Workout $\frac{0.48 \times 0.9}{0.12 \times 0.3}$

(3marks)

b) Workout $1\frac{1}{6} \times 1\frac{1}{2} \div 3\frac{1}{2}$

(3marks)

27. The table shows how a bank buys and sells foreign currencies.

Currency	Buying in Ugsh	Selling in Ugsh
1 US dollar	Ugsh3700	Ugsh3800
1 Pound sterling	Ugsh5100	Ugsh5200
1 Kenya shilling	Ugsh38	Ugsh39

a) How much money in Uganda shillings will one get from the bank on exchanging Ksh6800?
(2marks)

b) If a trader has 1520 British pound sterling, how many Us dollars will she get from the bank?
(3marks)

28. A cylindrical tin of radius 7cm contains 3080cm^3 of cooking oil. Opio used 2156cm^3 of the cooking oil.

a) What is the height of the remaining cooking oil in the tin? (Use $\pi = \frac{22}{7}$) (3marks)

b) Opio poured the remaining cooking oil into a rectangular tin with base area 77cm^2 . What is the height of the cooking oil in the tin? (2marks)

29. A motorist covered a distance of 120km in 2 hours from town A to town B. He then continued to the next town C at the same speed in $1\frac{1}{2}$ hours.

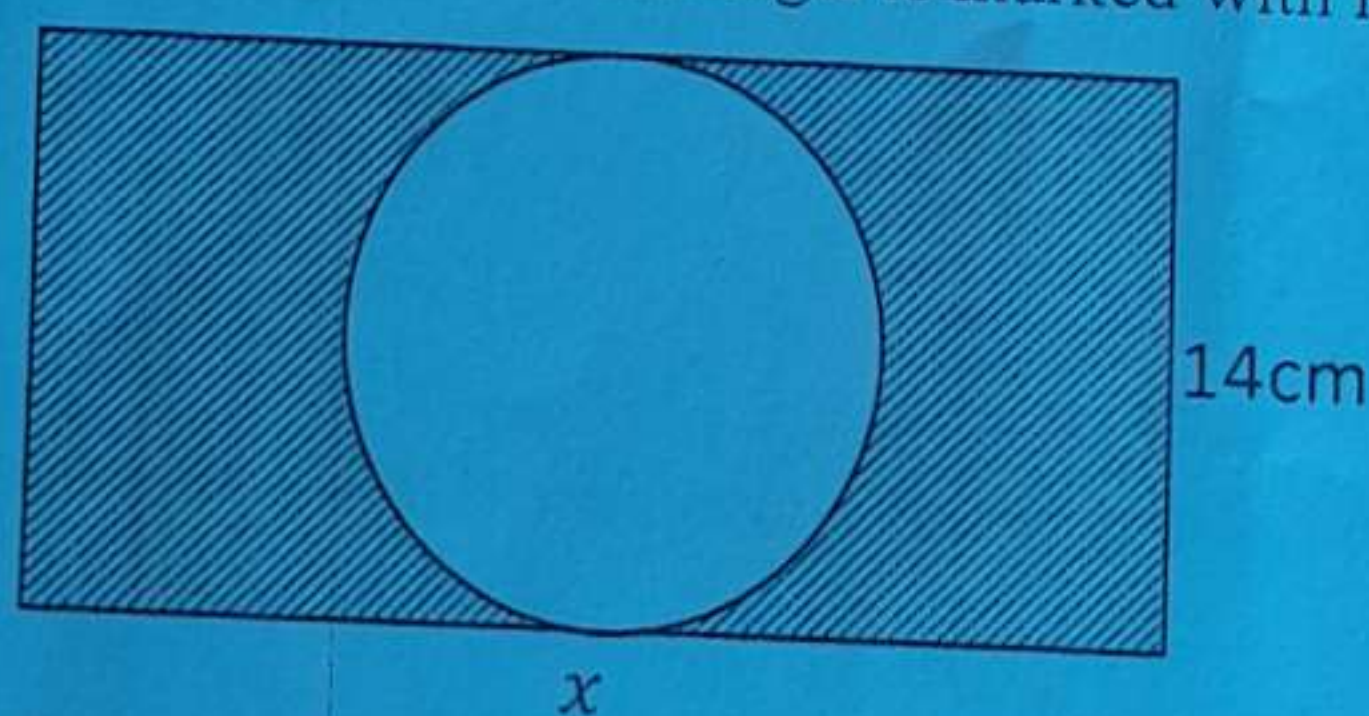
a) How far is town C from town A? (2marks)

b) Work out the motorist's average speed for the whole journey (2marks)

30. Using a ruler, a pencil and a pair of compasses only, construct a triangle ABC in which $AB=7\text{cm}$, angle $ABC=105^\circ$ and angle $ACB=30^\circ$. (4marks)

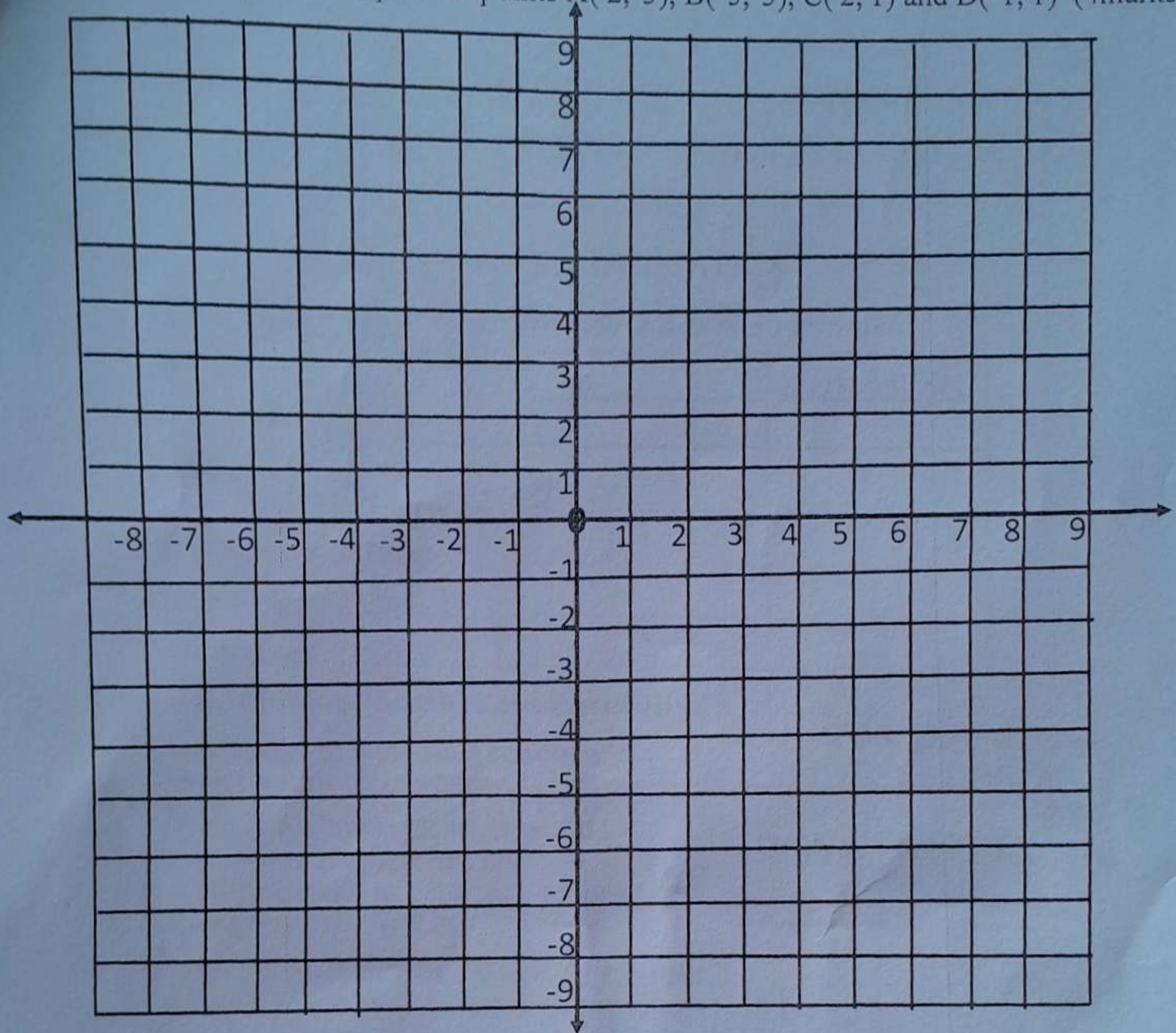
b) Measure the length BC.....cm (1mark)

31. In the figure below, a circle is enclosed in a rectangle. The area of the shaded part is 266cm^2 . The length of the rectangle is marked with letter x and the width is 14cm



Find the value of x (use $\pi = \frac{22}{7}$) (5marks)

32.a) On the graph below, plot the points $A(-2, +3)$, $B(+5, +3)$, $C(-2, -1)$ and $D(+1, -1)$ (4marks)



b) Join the points and name the quadrilateral formed

(2marks)

THE END